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S. HRG. 101-886

COMMUNICATIONS COMPETITIVENESS AND INFRASTRUCTURE MODERNIZATION ACT OF 1990

HEARING

BEFORE THE

SUBCOMMITTEE ON COMMUNICATIONS

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

ON

S. 2800

TO PERMIT TELEPHONE COMPANIES TO ENGAGE IN VIDEO PROGRAMMING

JULY 24, 1990

Printed for the use of the Committee on Commerce, Science, and Transportation

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COMMUNICATIONS COMPETITIVENESS AND INFRASTRUCTURE MODERNIZATION ACT OF 1990

TUESDAY, JULY 24, 1990

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
SUBCOMMITTEE ON COMMUNICATIONS,
Washington, DC.

The subcommittee met, pursuant to notice, at 11:05 a.m. in room SR-253, Russell Senate Office Building, Hon. Daniel K. Inouye (chairman of the subcommittee) presiding.

Staff members assigned to this hearing: Toni Cook and Tom Cohen, staff counsels; Gina Keeney and William Heyer, minority staff counsels.

OPENING STATEMENT BY SENATOR INOUYE

Senator INOUYE. First, my apologies. As all of you know, we just completed a vote on the agriculture bill, and the amendment happened to be one on sugar, which is very important to Hawaii.

The Communications Subcommittee meets today to hear testimony on S. 2800, a bill introduced by Senator Conrad Burns which will permit telephone companies to own or control video programming content.

Senator Burns originally offered his proposal at the committee's June 7 executive session as an amendment to the pending cable television bill. After extensive discussion, Senator Burns and other Members of the committee agreed to treat his proposal as a separate matter with a hearing and markup to be held prior to Congress' August recess.

While many Members have participated in the consideration of this issue, I particularly want to thank Senator Burns for his graciousness and understanding of the ways of the Senate. In fact, it is rather rare to see a new Member gain so much respect in such a short time.

In the 1984 Cable Telecommunications Act, the Congress codified a longstanding rule of the Federal Communications Commission. That is, except in rural locations telephone companies should not be permitted to own cable systems in their franchise areas. This action of the Congress was the most recent step in a lengthy history, at least 40 years old, of government policymaking to insure the telephone companies do not control both the means of transmission and conduit and the information content. This policy is based both on grave concerns about anticompetitive conduct by the telephone companies and on the First Amendment mandate to insure the

American public has the opportunity to hear our diversity of voices.

S. 2800 asks us to reexamine the balance that Congress struck in the 1984 Act. We are told that the telephone companies can solve any problems we have with the market power of the cable industry. We are told that we can rely on the Federal and State regulators to police anticompetitive conduct. After hearing many telephone company witnesses testify during the past year, I remain unconvinced that circumstances have changed so greatly that we should permit telephone companies to control information content.

I continue to believe that the best approach to this matter is the so-called video dial tone policy which was sanctioned by the current FCC chairman when he was at the National Telecommunications and Information Administration. I will listen, however, intently for new information and see how it bears on my position.

Let me provide one further thought. This debate is not about whether or not Members of this committee support the development of an optic fiber broad brand telephone network, because every Member of this committee wants to insure that the United States continues to have the best telephone network in the world. There are legitimate policy differences on how this should best occur. As I stated earlier, it is a question of balance between many competing policy objectives.

Regardless of the outcome of the debate on this bill, the United States telephone industry is going to put in optic fiber cable, and certain telephone companies are accelerating its development and deployment. I was just informed that one very large company is planning to have fiber for the curb for 100 percent of its customers by the year 2010. This is a full ten years ahead of earlier plans, and it is clearly many years ahead of what other companies are doing.

At this time, before calling upon my colleagues may I recognize the author of this bill, Senator Burns.

OPENING STATEMENT BY SENATOR BURNS

Senator BURNS. Thank you, Mr. Chairman.

It seems like it does not take much to get a crowd on this issue.

I would take this opportunity to thank you and the committee Chairman, Mr. Hollings, for agreeing to these hearings on my bill, S. 2800. Your graciousness is very much appreciated.

Telco entry into cable service and programming is not simply a turf battle among industries. The issue is of far greater importance. The timely deployment of fiber optics to every business, school and home is essential to maintain American competitiveness in the information age, to provide the best possible education and training to our students and our workers, and to bring the best advanced information services to rural America.

I have an illustration of my State of Montana of how we are made up out here. Rural states like my own are served by independent telephone companies and cooperatives. This legislation will allow people who live in less populated areas access to the same advanced informational services as the rest of the Nation. I am sure that if you were to look at the areas covered by independ-

ent telephone companies and cooperatives in other rural states, they would mirror the ones shown here.

I would say that if you look over on that chart that shows the State of Montana, the big gray area in Eastern Montana which we call Mid Rivers Telephone probably is larger than quite a few of the states that are located in the northeast part of our country.

The degree of competition in cable service and programming will determine the rate at which fiber optics are deployed and how fast that will occur here in America. If this country continues antiquated regulatory policies which stifle competition in this critical field, the United States will fall behind other nations which at this time are accelerating the installation of fiber and fiber optic technology. The long-term consequences will be quite detrimental to our interests as a Nation.

The Telecommunications Industry Association, TIA, which is composed of manufacturers of telecommunications equipment and components for both the cable and telephone industry has determined through the comprehensive assessment of all studies on the subject that deployment of fiber to every consumer is stalled on the way to the home under current government policies. The TIA assessment clearly and unequivocally demonstrates that fiber deployment will only be accelerated if telco entry to both cable service and programming is permitted. Enactment of my bill will greatly accelerate the rate of fiber deployment here in the United States and inject much-needed competition into the video programming marketplace.

The policy of this great Nation is to support competition in the marketplace. Recent studies have shown that our ability to compete internationally depends upon the healthy competition among industries at home. The certain prohibition of telcos in video programming is industrial policy pure and simple. The prohibition has the effect of picking winners and losers by favoring one segment of communications industry over another. The issue of telco entry is a test of our commitment to competition.

This bill presents an opportunity for Congress to support a proposal that has tremendous benefits and great public appeal to the consumer, the educator, the health care professionals, the businessmen, emergency support people, students and workers.

Again, let me thank you, Mr. Chairman, for agreeing to hold this hearing. I look forward to hearing from our distinguished witnesses. Thank you very much.

Senator INOUYE. Thank you very much, and may I now recognize Senator Packwood.

OPENING STATEMENT BY SENATOR PACKWOOD

Senator PACKWOOD. Mr. Chairman, thank you.

I may be the only person on this committee that thinks cable is doing a reasonably good job and that we do not need much change in the way anything operates. I understand the argument about competition. I guess nothing is perfect. Every now and then I will switch through the channels just to see what is on, and I am fascinated about the diversity and, frankly, the very good programming

that is there for $15 or $20 a month or whatever I guess you call basic prices.

Can it be improved upon? I suppose so. There is nothing perfect. There is only a better way to do things. I think what is going to happen if we let the telephone companies in, assuming you are going to let any telephone company in in its own service area or any other service area, I do not think you are going to get competition. I think the phone companies will buy up the cable companies.

If this bill passes, I think one of the best investments around would not be telephone company but cable company stock, because when Atlantic Bell and others begin to bid against each other for the ability to buy the cable company in Phoenix or Portland or Butte, I think the value of those properties is going to skyrocket. We are not going to get competition; what we are going to get is telephone cable, not cable and telephone cable.

So I will just conclude by saying I think cable has delivered what we hoped it would deliver when we passed basically the deregulations and has delivered it in spades. We ought to let well enough alone. If the telephone companies get in, I would predict that the cable stocks will double or triple in price as the different competitors attempt to buy them out to have the privilege of being the new monopoly provider of service in the area.

Senator INOUYE. Does any Member wish to be recognized before we call upon the witnesses?

Senator Gore.

OPENING STATEMENT BY SENATOR GORE

Senator GORE. Thank you, Mr. Chairman. I want to join Senator Burns in thanking you for holding this hearing. You have fulfilled your promise to move swiftly to consider the telco entry issue prior to Senate floor action on the cable bill. While Members of this committee have not always agreed on all the specifics in the cable legislative efforts, everyone on the committee agrees that you and your staff have been eminently fair and have bent over backwards to cooperate with the Members of the subcommittee who have been pushing hard to pass meaningful legislation in this Congress. I thank you very much.

The issue before us today and on the floor in coming days is whether or not cable competition will be enhanced by allowing telephone companies into the cable business and, if telephone companies enter this business, whether the FCC can produce adequate safeguards against cross-subsidy and anticompetitive behavior.

Opponents of telco entry would have us believe the answer to the second question is a flat and resounding no, end of discussion. I do not believe it is that open and shut. For some time I have been convinced that the only way cable consumers will ever be treated fairly is if competition is allowed to develop and thrive.

Cable rate reregulation is to some extent necessary in the short term, but for the long term competition is the answer. That is the theory on which I based my efforts over the past seven years to get a fair deal for home satellite dish owners, and we have made some progress in that area although much more needs to be done. The home satellite dish, however, is only one part of the competitive

mix that consumers need. Wireless cable, new high powered K-band DBS systems and even competing local cable operations offer the kind of open marketplace that will not only benefit consumers by keeping prices fair and competitive but should spur new creative programming opportunities as well.

No potential competitor has created as much controversy as the telephone company with the potential for bringing fiber optic cable near to or even into the homes of millions of consumers. Cable operators and even some broadcasters and publishers fear that this technological leap combined with the marketing clout and local network of the telephone company could threaten their businesses. With adequate safeguards, that gloomy scenario need not prevail.

If fiber becomes ubiquitous in our telecommunications infrastructure, it does offer major benefits for consumer and video providers as well. In some instances where a cable operator has been particularly unresponsive to local concerns—and I can give some examples—a telephone company could provide competition as an overbuilder or, if invited by the franchising authority, compete for the franchise at renewal.

Whatever the likely role of the telephone company in providing video services, it is unlikely to destroy the cable industry, and it could clearly help consumers and their communities cope with an undesirable incumbent cable operator.

If cross-subsidy safeguards were not possible, I would be among the first to oppose any form of telephone company involvement in the cable business, but hundreds of small telephone companies already offer cable services with few, if any, complaints. I am confident that the FCC can produce such safeguards as outlined in the Burns bill, so I support this legislation because it will stimulate competition, because it does not violate the modified final judgment, because it could accelerate the development of a much-needed fiber optic network, and because the bill has the necessary safeguards to prevent cross-subsidies and other anticompetitive behavior.

It is time to seriously consider whether we are going to insure that consumers have an open competitive marketplace or whether we are going to perpetuate the kind of marketplace which has produced so many anticompetitive distortions.

Thank you, Mr. Chairman.

Senator INOUYE. Thank you very much.

Senator EXON.

OPENING STATEMENT BY SENATOR EXON

Senator EXON. Mr. Chairman, I have a very brief opening statement. I thank Senator Burns for bringing up this matter, and I am going to be listening very intently to the debate that is going to go on, on this legislation. I am certain that Senator Burns is trying to do the right thing. And that leads me in the direction of possibly we can take his bill or something as a substitute thereof, that might accomplish what the good features of the Burns bill proposes to do.

I think, though, that we should have a very thorough understanding on what we are doing and what we are not doing with the

Burns bill. And I am not sure that at this time I have all the answers to all of those questions. Certainly, I feel that the consumer interests must, above everything else, be protected.

And probably, as much as anything else, Mr. Chairman, we are going to have debates on what indeed is the consumers' interest in the long run.

I also happen to feel that more competition in almost every area is good for the consumer. I am concerned about the possibility of the telephone company possibly finding themselves, 10 to 12 years from now, back in the same place that caused the breakup of the telephone system when it was originally brought to the attention of the Congress.

So it seems to me that there are pros and cons on this bill. And I, as one senator, am going to listen to the debate and try and be involved in it as much as I can. And if we are going to report out something like the Burns bill, I think all should understand that we may offer amendments at some time on the floor, either as Committee amendments or something else, if we can get the majority of the Committee to go along.

I congratulate you for calling this meeting, as you had agreed to when we discussed this matter earlier, Mr. Chairman. And I am looking forward to the discussion, the explanation, and the debate.

Senator INOUYE. Thank you very much.

And now our first witness.

Senator DANFORTH. Mr. Chairman.

Senator INOUYE. I am sorry. Senator Danforth.

Senator DANFORTH. Mr. Chairman, Senator Pressler wanted very much to be here today and to participate actively in these hearings. His father passed away this past weekend. He is in South Dakota for the funeral, and he has asked me to explain the reason for his absence. I am sure we all express our sympathies to him.

He would also like to be permitted to submit a statement for the record.

Senator INOUYE. Without objection, so ordered.

[The statement follows:]

OPENING STATEMENT BY SENATOR PRESSLER

Mr. Chairman, I congratulate my distinguished colleague, Mr. Burns, for his efforts in this area. This is an extremely important public policy issue and one this committee should be debating.

I have heard a great deal from my South Dakota constituents on this issue. We in rural America may have several concerns with the legislation. We all support the technological advancements this legislation is designed to bring. However, we've very concerned that, without specific rural development incentives, we will be years if not decades behind the urban areas in obtaining the technological advances this bill is designed to encourage.

Most of those who have contacted me with concern over this legislation support allowing the small independents and rural telephone cooperatives into the cable television business, but are very concerned about the entry of the largest telephone companies.

They might support the legislation if there are positive restrictions on the large telcos, but they are not contained in this legislation, so they are very much opposed to it.

I commend Senator Burns' approach in this legislation. He has a sincere desire to help rural America. But many of my constituents are convinced that this bill as written would have the opposite impact—diminishing competition in the future and thereby restricting consumer access to a broad base of information at affordable

rates. I look forward to working with him as we go forward on this issue in an attempt to devise a workable bill.

Senator STEVENS. Mr. Chairman, I do not want to make a statement, but I want to make a request to the Chairman. And that is it seems to me that we are going into one of the most complex public issues in the United States today. It involves cable interests, newspapers, over-the-air broadcasting, the telephone companies, the video, and movie producers.

It seems to me that this whole complex web of issues ought to be subject to some hearings in the field. I really believe, without any comments concerning the audience here today, that there are a tremendous number of people in the country that would like to be heard on this issue. And we ought to take the Subcommittee to the field early next year. Because I fear that we may not be keeping a level playing field as we look at this whole complex web just piece by piece.

I really think we need a new communications, telecommunications, and entertainment act, you might say, something that looks at the whole spectrum of these issues.

Senator INOUYE. I believe your comments are just right on target. And as chairman of the subcommittee, if I am still chairman, I can assure you that it will be high on my agenda. I hope to have extensive hearings not just on cable, but on the whole telecommunications problem that we face now.

Senator Burns, did you have something?

Senator BURNS. Mr. Chairman, I would ask unanimous consent—I have got a whole stack of supporting information here that I would like to put in the record.

Senator INOUYE. All of that?

Senator BURNS. Yes. We were afraid you would run out of things to do tonight.

Senator INOUYE. Without objection, so ordered.

Senator FORD. Mr. Chairman, under the circumstances, I would suggest that they be filed for the record and not reprinted.

Senator BURNS. That would be fine.

Senator INOUYE. Senator Gorton.

OPENING STATEMENT BY SENATOR GORTON

Senator GORTON. Mr. Chairman, the various opening statements here have already indicated I think a unity in philosophy in this connection, in a belief that competition and diversity is an important goal on which we are united. It has already showed a considerable difference of opinion as to how we gain those goals.

I am a cosponsor of the Senator Burns bill, because I have believed that it moves in the direction of greater diversity and greater competition. Nevertheless, it is important that I register a couple of reservations at this point. I am inclined to believe that at the beginning of the process, the 25 percent owned or controlled programming figure is rather high. I cannot imagine that once we have passed a bill like this that we are likely to lower that kind of requirement on a statutory basis. And I tend to favor a somewhat lower initial limitation.

Perhaps more important is that as the philosophy behind the act, if we pass it, is to increase diversity and competition. And as we are dealing with companies which have a guaranteed income in their basic field of endeavor, we want to make absolutely certain that we do not substitute one monopoly for another.

I am not totally convinced that the separate subsidiary rules or the accounting rules which are contained in this bill succeed in reaching that goal. And I believe that probably, and only to pass a bill of this sort, we need to give the Federal Communications Commission both the authority and the direction that it act in such a fashion as to limit the penetration of telephone companies to something less than a monopoly in significant markets.

I am not exactly certain how to do that at this point, but I think it important even at this stage to say that in order to see to it that we gain that diversity and gain that competition, that we not create a situation in which one monopoly can be substituted for another.

Technically, of course, in this bill we are only dealing with the non-Bell operating companies. But I believe that all of us recognize that whatever frame of reference we create for these telephone companies is very likely to be created within the foreseeable future for the Bell operating companies as well. And so we should proceed with caution. But I do believe that we should proceed.

Senator INOUYE. Thank you very much.

[The bill follows:]

101ST CONGRESS
2D SESSION

S. 2800

To permit telephone companies to engage in video programming.

IN THE SENATE OF THE UNITED STATES

JUNE 27 (legislative day, JUNE 11), 1990

Mr. BURNS (for himself, Mr. DOLE, Mr. GORE, Mr. DANFORTH, Mr. FORD, Mr. GORTON, Mr. MCCAIN, and Mr. LOTT) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To permit telephone companies to engage in video programming.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SHORT TITLE

SECTION 1. This Act may be cited as the "Communications Competitiveness and Infrastructure Modernization Act of 1990".

FINDINGS

SEC. 2. The Congress finds that—

(1) the absence of effective competition for cable television companies has resulted in high consumer rates and poor service quality;

(2) consumers will benefit from the competition which could occur if telephone companies are permitted to provide video programming service, subject to appropriate safeguards;

(3) such competition will also stimulate innovative two-way interactive video services with applications for education, health care, and information exchange;

(4) competition in the provision of video services by telephone and cable television companies can accelerate the development of modern broadcast networks and technology;

(5) competition in the provision of video services will strengthen the position of the United States in world markets by stimulating innovation;

(6) competition will help to ensure that video services and advanced communications services are made available in all areas of the country and to all consumers;

(7) the ability of telephone companies to create new programming services will expand consumer choice and accelerate the deployment of modern broadband networks;

(8) the creation of video gateways will guarantee access for the program services and ensure diversity; and

(9) consumers can gain further benefits of market competition if franchising authorities abandon the practice of awarding exclusive cable television franchises and instead award franchises in the same locality to competitive cable systems.

CABLE SERVICE PROVIDED BY TELEPHONE COMPANIES

SEC. 3. (a) Section 613(b) of the Communications Act of 1934 (47 U.S.C. 533(b)) is amended to read as follows:

"(b) It shall be unlawful for any common carrier, subject in whole or in part to title II of this Act, to provide video programming in its telephone exchange service area except as provided in part V and other provisions of this title.".

(b) Title VI of the Communications Act of 1934 (47 U.S.C. 521 et seq.) is amended by adding at the end the following new part:

"PART V—CABLE SERVICE PROVIDED BY TELEPHONE COMPANIES

"SEPARATE VIDEO SUBSIDIARY

"SEC. 651. (a) Except as provided in subsection (d) of this section, a carrier which provides telephone exchange service shall not provide video program service in its telephone exchange service area unless such video program serv-

ice is provided through an affiliated video program subsidiary that is separate from such carrier.

"(b) A video program subsidiary of a carrier which provides telephone exchange service shall—

"(1) maintain books, records, and accounts separate from such carrier which identify all transactions with such carrier;

"(2) carry out directly (or through any nonaffiliate or any other subsidiary of such carrier) its own marketing and sales except that the institutional advertising carried out by such carrier shall be permitted so long as each party bears its pro rata share of the costs; and

"(3) not own real or personal property in common with such carrier.

"(c) Any contract, agreement, arrangement, joint venture, partnership, or other manner of conducting business, between a carrier which provides telephone exchange service and an affiliated video program subsidiary, providing for—

"(1) the sale, exchange, or leasing of property between such subsidiary and such affiliated carrier;

"(2) the loan of money or other extension of credit between such subsidiary and such affiliated carrier or between such subsidiary and a third party directly or indirectly guaranteed by such affiliated carrier;

"(3) the furnishing of goods between such subsidiary and such affiliated carrier; or

"(4) the transfer to or use by such subsidiary for its benefit of any assets of such affiliated carrier,

shall be pursuant to regulation prescribed by the Commission, shall be on a fully compensatory and auditable basis, shall be without cost to the ratepayer of the carrier which provides telephone exchange service, and shall be in compliance with rules established by the Commission which will be sufficient to enable the Commission to assess the compliance of any transaction.

"(d) The requirements of this section may upon the showing of good cause, by a carrier, video program subsidiary, or any other person, be waived by the Commission if the Commission determines that the public interest, convenience, and necessity will be served by the waiver.

"PROHIBITION OF CROSS-SUBSIDIZATION

"SEC. 652. (a) A carrier which provides telephone exchange service shall not engage in practices (including but not limited to the improper assignment of costs) which are prohibited by the Commission or by the States in order to subsidize directly or indirectly its separate video program subsidiary.

"(b) If the Commission finds, after notice and opportunity for hearing, that any such carrier has willfully and knowingly violated subsection (a), the Commission shall order such

carrier to divest itself of any ownership in, or control over, such separate video program subsidiary.

"PROVISION OF AFFILIATED VIDEO PROGRAM SERVICES

"SEC. 653. (a) A video program packager may not provide affiliated video programming services numbering in excess of one-fourth of the total number of video program services simultaneously available for customer selection.

"(b) The Commission shall, not later than two years after the date of enactment of this part and every two years thereafter, evaluate the effect of subsection (a) on the video programming marketplace and, on the basis of that evaluation, make recommendations to Congress concerning appropriate modifications, if any, to subsection (a).

"(c) The carriage of local broadcast signals pursuant to section 614 shall not constitute the provision of affiliated video program services and, therefore, shall not be counted against the capacity limitation imposed on affiliated program services under this section.

"ESTABLISHMENT OF VIDEO GATEWAYS

"SEC. 654. Any carrier which provides telephone exchange service and the video programs service of its video program subsidiary over an integrated broadband distribution system in its telephone exchange service area shall establish a video gateway. The Commission, together with the States, shall establish the rates, terms, and conditions for access to such gateway, except that the carrier shall be prohibited from

discriminating in favor of its affiliated video programming services or its own video program packaging in providing access to such gateway or in providing services with respect to such gateway.

"PROHIBITION ON BUYOUTS

"SEC. 655. (a) No carrier which provides telephone exchange service, nor any entity owned by or under common ownership or control with such carrier, may purchase or otherwise obtain control over any cable system which is located within its telephone exchange service area and is owned by an unaffiliated person; except that such carrier shall not be prevented from obtaining a noncontrolling interest in such cable system through joint venture or other means.

"(b) The Commission may waive the restrictions in subsection (a) of this section only upon a showing by a carrier that—

"(1) the facilities of the cable system will be substantially upgraded through the deployment of modern technology, including fiber optics;

"(2) the capacity of the cable system and types of services offered will be expanded;

"(3) the purchase or acquisition of control will otherwise be in the public interest; and

"(4) the local franchising authority approves of such waiver.

"POLES, DUCTS, CONDUITS, AND RIGHTS-OF-WAY

"SEC. 656. (a) Any carrier which provides telephone exchange service and which seeks to provide an affiliated video program service in its telephone exchange service area shall demonstrate to the Commission that it makes available to one or more unaffiliated cable operators, within the limits of technical feasibility, attachment rights to any pole, duct, conduit, or right-of-way which is owned by the carrier within such telephone exchange service area.

"(b) The showing required by subsection (a) of this section shall be deemed to have been made if an unaffiliated cable operator currently has obtained the attachment rights described in subsection (a).

"(c) Nothing in this section shall affect the authority of the Commission or the States to regulate the rates, terms, and conditions for pole attachments as provided for in section 224 of this Act.

"PROHIBITION ON MARKETING AND SELLING VIDEO PROGRAM SERVICES

"SEC. 657. Notwithstanding any provision of this part or any rule or regulation prescribed by the Commission under this part, no employee of a carrier which provides telephone exchange service shall market or sell video program services to such carrier's telephone exchange service customers.

"CUSTOMER PROTECTION

"SEC. 658. (a) The Commission shall, within one hundred and eighty days after the date of enactment of this part, convene a Federal-State Joint Board under the provisions of section 410(c) of this Act for the purpose of establishing the practices, classifications, and regulations as may be necessary to ensure proper jurisdictional separation and allocation of the costs of providing broadband services, including video transport service.

"(b) The Commission, with respect to interstate switched access service, and the States, with respect to telephone exchange service and intrastate switched service, shall within one year after the date of enactment of this part establish rules and regulations as may be necessary to ensure that no customer pays more for such services than would have been the case if the carrier providing such services to such customer was not also providing video program services.

"(c) Nothing in this section shall be construed to limit or supersede the authority of any State or the Commission with respect to the allocation of costs associated with intrastate or interstate communication services.

"REQUIREMENT FOR FREE CARRIAGE OF LOCAL BROADCAST SIGNALS

"SEC. 659. Notwithstanding any other provision of this Act, a video program subsidiary of any carrier which provides telephone exchange service may not charge a local

broadcast station for making available its signal to subscribers.

"RURAL TELEPHONE EXCHANGE SERVICE CARRIERS

"SEC. 660. Notwithstanding the provisions of sections 612 and 623, no Federal agency or State may regulate the rates for basic cable service charged by a carrier providing simultaneously both telephone exchange service and video program services in a rural area on the date of enactment of this part, unless—

"(1) the rates charged by such carrier increase by more than 5 percent per annum; or

"(2) more than 10 percent of the customers of such program services have submitted a formal complaint to the Federal or State agency with jurisdiction over such rates.

"RURAL AREA EXEMPTION

"SEC. 661. The requirements of this part, other than those set forth in section 660, shall not apply to video program services provided in a rural area by a carrier that provides telephone exchange service in the same area.

"APPLICABILITY TO CERTAIN TELEPHONE COMPANIES

"SEC. 662. (a) The provisions of this title, other than those set forth in sections 651, 652, 655, 656, 657, and 658, shall not apply to a common carrier, subject in whole or in part to title II of this Act, if—

"(1) the public switched network of the carrier has the capability to transmit video programming directly to subscribers;

"(2) the common carrier has no editorial control over or ownership interest in the content of the video programming; and

"(3) such capability is offered to subscribers on a regulated common carrier basis, including nondiscriminatory access.

"(b) Neither a carrier to which subsection (a) applies, nor the users of the capability of that carrier described in subsection (a)(1), shall be required to have a franchise under this title.

"EFFECT ON CERTAIN ANTITRUST RESTRICTIONS

"SEC. 663. Nothing in this part shall be construed to permit any telephone company to have any ownership interest in any video program service provided to subscribers, if such telephone company is otherwise restricted under the antitrust laws of the United States from owning such an interest.

"DEFINITIONS

"SEC. 664. For purposes of this part—

"(1) the term 'affiliated video program service' means any video program service which is owned by or under common ownership with the video program

packager which is distributing such video program service directly to subscribers;

"(2) the term 'rural area' means a geographic area that does not include either—

"(A) any incorporated or unincorporated place of twenty thousand inhabitants or more, or any part thereof; or

"(B) any territory, incorporated or unincorporated, included in an urbanized area;

"(3) the term 'video gateway' means a broadband switched service which enables a subscriber to interactively select from multiple video program services which are simultaneously available;

"(4) the term 'video program packager' means a cable operator that is affiliated with a carrier which provided telephone exchange service, or a person so affiliated who provides video program packaging to subscribers over a cable system or other video distribution system; and

"(5) the term 'video program packaging' means the offering of a specific video program service or services together with the advertising or other promotion of such service or services, except that such term does not include billing and collection for video program

services or the advertising and promotion of video services generally; and

"(6) the term 'video program service' means a video service offering which provides a single channel of video programming for an extended period of time, together with accompanying audio and text programming, and which is offered to subscribers either singly or as a part of a package of several services.".

FRANCHISES

SEC. 4. (a) Section 621(a)(1) of the Communications Act of 1934 (47 U.S.C. 541(a)(1)) is amended by inserting immediately before the period at the end the following: "except that a franchising authority may not unreasonably refuse to award a second competitive franchise. For purposes of this subsection, refusal to award a second franchise on the grounds of technical infeasibility shall be deemed not to be unreasonable. Any applicant whose application for a second franchise has been denied by a final decision of the franchising authority may appeal such final decision pursuant to the provisions of section 635 for failure to comply with this subsection".

(b) Section 635(a) of the Communications Act of 1934 (47 U.S.C. 555(a)) is amended by inserting "621(a)(1)," immediatley after "section".

(c) Section 621 of the Communications Act of 1934 (47 U.S.C. 541) is amended by adding at the end the following new subsection:

"(f) Any cable operator which—

"(1) is owned or controlled by a carrier that provides telephone exchange service, and

"(2) seeks to provide cable service over a cable system,

may not provide cable service without a franchise.".

Senator INOUYE. And now may I call upon the Deputy Assistant Secretary for Communications and Information Policy of the United States Department of Commerce, National Telecommunications and Information Administration, the Hon. Thomas Sugrue.

Mr. Sugrue.

STATEMENT OF THOMAS SUGRUE, DEPUTY ASSISTANT SECRETARY FOR COMMUNICATIONS AND INFORMATION, DEPARTMENT OF COMMERCE; ACCOMPANIED BY WILLIAM F. MAHER, CHIEF, DOMESTIC POLICY OFFICE

Mr. SUGRUE. Good morning, Mr. Chairman, Senators. It is a pleasure for me to appear before this Subcommittee on behalf of the Administration to address the question of cable television legislation.

With me at the witness table today is Mr. William F. Maher, the chief of our Domestic Policy Office, who has been very involved in cable issues for NTIA.

I have prepared a brief oral statement, and I request that my complete written statement be entered into the record of these hearings.

Senator INOUYE. Without objection, it is so ordered.

Mr. SUGRUE. I am here to offer the Administration's views on S. 2800, the Communications, Competitiveness and Infrastructure Modernization Act of 1990. The Administration strongly supports the thrust of S. 2800, although we believe that the bill can be refined in certain respects to increase further the likely benefits of the bill for consumers. The Administration believes that pro-consumer objectives can best be accomplished in the long run not by reregulating the cable industry, but by expanding competition in the provision of video services to the home.

That is the fundamental virtue of S. 2800.

In our view, by removing government-imposed barriers to telephone company entry, the bill would promote competition in the video services marketplace. Allowing telephone companies to provide cable service would raise the prospect of another effective provider of multichannel programming to television viewers, thus offering direct competition to incumbent cable system operators.

Just as importantly, telephone company entry into cable could indirectly increase competition as well. In the cable industry today, the owner of the video distribution facility selects the programming that will be transmitted over that facility. By contrast, telephone company entry into cable can be structured in a way that will multiply opportunities for competitive entry by independent program providers.

S. 2800 represents a major step in that direction.

Besides bringing the promise of expanded competition in the provision of video to the home, telephone company entry into cable could also generate other important benefits. The opportunity to provide programming should increase telephone companies' incentives to construct integrated broadband network facilities to carry that programming to the home.

In turn, those facilities could make available a vast array of voice, data, and video services to subscribers. In offering this vision, I recognize that there is some controversy about the future development of integrated switched broadband networks. But we do not have to resolve this debate to conclude that the cable/telco cross ownership restrictions should be eliminated.

Removal of these restrictions, subject to appropriate safeguards, will ensure that technology and marketplace developments, rather than government fiat, will determine the capabilities of our future telecommunications infrastructure. Although permitting telephone companies to offer video programming promises significant benefits for consumers, the Administration believes that entry by telephone companies into video services should be accompanied by competitive safeguards to ensure that the goal of greater competition in this market is achieved.

First, telephone companies should be required to enter the cable business de novo, rather than through acquisition of existing cable systems. Repeal of the cross ownership restriction will not promote development of integrated switch broadband networks if telephone companies can simply buy up the non-switch networks offered by the typical cable system.

In the Administration's view, therefore, S. 2800 correctly bars telephone companies, under most circumstances, from acquiring existing cable systems. However, the bill does not appear to preclude telephone companies from acquiring minority interests in cable systems. This seems an unwise policy because it could too easily permit agreement between these potential competitors not to compete, but to "get along" and become partners.

While such agreements may serve the interests of the contracting firms, the benefits for consumers are more obscure.

The second major safeguard concerns regulations to prevent discriminatory practices and cross-subsidization by telephone companies with respect to their competitive video programming operations. This could be accomplished by directing the Federal Com-

munications, FCC, to adopt specific regulations addressing these concerns.

Regarding safeguards against discriminatory conduct, one potentially effective means of achieving this goal would be for the FCC to permit telephone companies to enter the video marketplace subject to its open network architecture, or ONA, policy. Pursuant to this approach, telephone companies would provide underlying transmission facilities on a common carrier basis while they would provide video programming services on a competitive deregulated basis.

Both NTIA and the Department of Justice have supported the ONA model adopted by the FCC in regulating provision of enhanced services by the Bell Operating Companies. By guaranteeing nondiscriminatory access to the BOCs' underlying transmission facilities, ONA promises to foster competition in the provision of the many enhances services that are built upon those transmission facilities.

The FCC in its pending proceeding on its own cable/telco cross-ownership rules has suggested that a similar approach could produce significant benefits where telephone companies offer video services.

Apart from these specific comments with respect to nondiscrimination, the administration has two brief comments on safeguards generally. First, the safeguards adopted should not be too onerous. Here, the best can certainly become the enemy of the good. Little will be gained if the potential benefits of telephone company entry into cable are undermined through overly rigid provisions.

Second, we recommend that Congress avoid attempting to specify detailed safeguards in this legislation. Telecommunications is a dynamic, rapidly-changing industry. As a result, regulation of that industry must be sufficiently flexible to keep in step with ever-changing market conditions. The legislative process is not well suited to providing such flexibility. A better approach on which Congress has relied heavily over the years would be to allow the safeguards to be crafted by an expert administrative agency—in this case the FCC—pursuant to broad guidance from Congress on policy and careful oversight from Congress on implementation.

In conclusion, I note some irony in the current debate over cable regulation. In a sense, the problems with the cable industry are product of its own success. In the late 1970s and early 1980s cable was somewhat of a video curiosity, an amalgam of broadcast channels, a few movie channels and a lot of low budget news, music videos and Australian rules football. In the last decade, through high risk program investments and aggressive marketing cable has transformed itself into a major force in the video marketplace. The 1984 Cable Act contributed significantly to that transformation.

This is not to say that this process has been free of problems. It does suggest, however, that in addressing these problems Congress should not enact regulations that will dampen further growth and harm consumers. The administration believes that S. 2800, by promoting new competitive entry, is a sound and measured response to concerns about the current state of the cable industry.

That concludes my testimony, and I will be happy to answer any questions you might have.

[The statement follows:]

Statement of

Thomas J. Sugrue
Deputy Assistant Secretary for
Communications & Information
United States Department of Commerce

Good morning Mr. Chairman. It is a pleasure for me to appear before this subcommittee on behalf of the Administration to address the question of cable legislation.

I am here to offer the Administration's views on Senate Bill 2800 -- the "Communications Competitiveness and Infrastructure Modernization Act of 1990." The Administration strongly supports the thrust of S. 2800; by removing a government-imposed barrier to entry, we believe this bill will promote competition in the delivery of video services, and provide incentives for more rapid technological development of our nation's telecommunications infrastructure. However, we also believe that Senator Burns' proposal can be refined in certain respects to increase further the likely benefits of the bill for consumers.

Benefits of the 1984 Cable Act

To provide some context for the Administration's position on S. 2800, I would first like to discuss briefly cable legislation generally. Amidst the present controversies about the purported flaws of the 1984 Cable Act, we risk losing sight of the benefits that the 1984 Act has produced for television viewers. Since 1984, there has been an explosion in the variety and popularity of cable television service. More than 90 percent of all cable subscribers are now served by systems with 30 or more channels, as compared to only 57 percent in 1984. Moreover, there are now some 64 national cable programming networks, a 60 percent increase since 1984. Given this increase in programming choices

available to cable subscribers, it is not surprising that subscribership has jumped some 43 percent in the past five and a half years.

Nevertheless, there is considerable concern that these benefits have come at too great a cost, particularly in the form of substantially higher basic cable rates. For example, two studies by the General Accounting Office have concluded that, since deregulation, basic rates have increased at a pace that exceeded the inflation rate by a considerable margin. On the other hand, the same studies indicated that the price per basic service channel increased less than inflation over that same period. To a degree, this may reflect the carriage by cable systems of services that many subscribers neither need nor want. However, it also reflects both the introduction of valued new services (such as TNT), as well as more extensive carriage of pre-existing basic cable networks (such as the Discovery Channel, the Nashville Network, and Video Hits 1). Furthermore, it is clear that the quality of programming carried on many of the more popular cable networks has also increased --CNN in news and ESPN in sports, to cite just two examples, have become leaders in their fields, which is reflected in the growing audiences they attract.

These confounding factors surrounding the movement of basic rates since deregulation suggest the need for caution in reacting

to developments in the cable industry. Moreover, while basic rate increases rightfully concern policymakers, they must not be allowed to obscure the benefits produced by the 1984 Act. The policy challenge is to reform the legislative and administrative regulatory structure in ways that increase competition and benefit consumers without destroying the incentives cable systems currently have to continually improve the quality and variety of their services.

Congress Should Increase Competition, Not Re-Impose Regulation

The Administration believes that pro-consumer objectives can best be accomplished in the long run, not by re-regulating the cable industry, but by expanding competition in the provision of video services to the home. That is the fundamental virtue of S. 2800. Our preference for competition is well-founded. Experience has shown that in competitive markets, firms are driven to provide the mix of services most valued by consumers at prices that reflect the costs of providing those services. Moreover, by requiring and rewarding creative, dynamic behavior on the part of market participants, competition provides a strong, continuous stimulus for innovation.

On the other hand, regulation is a cumbersome, often highly politicized process that seldom produces rates and services equivalent to those that would prevail under competitive market conditions. Moreover, the costs that regulation imposes on firms

will inevitably reduce any net benefits to consumers. Finally, regulation cannot replicate the dynamic efficiencies of a competitive market. For these reasons, cable legislation that re-imposes rate regulation and regulates the relationship between programmers and cable operators, rather than promoting competitive entry would be counterproductive. Such an approach could likely retard investment and discourage development of new video services, to the ultimate detriment of video consumers, the people we are trying to help.

Benefits of Telephone Company Entry Into Cable Television

The Administration believes that by removing government-imposed barriers to telephone company entry, S. 2800 would promote competition in the provision of video to the home. Allowing telephone companies to provide cable service would raise the prospect of another effective provider of multichannel programming to television viewers, thus offering direct competition to incumbent cable system operators.

Just as importantly, telephone company entry into cable could indirectly increase competition as well. In the cable industry today, the owner of the video distribution facility selects the programming that will be transmitted over that facility. By contrast, telephone company entry into cable can be structured in a way that will multiply opportunities for

competitive entry by independent program providers. S. 2800 represents a major step in that direction.

Besides bringing the promise of expanded competition in the provision of video to the home, telephone company entry into cable could also generate other important benefits. The opportunity to provide programming should increase telephone companies' incentives to construct integrated broadband network facilities to carry that programming to the home. In turn, those facilities could make available a vast array of voice, data, and video services to subscribers.

In offering this vision, I recognize that there is some controversy about when, or whether, integrated, switched broadband networks will be a reality. Some contend that, based on present costs, such networks will not be deployed for some time, even if telephone companies are allowed to provide video programming over them. Others argue both that technology and economic factors make integrated switched broadband networks inevitable in the long run and that permitting telephone companies to provide video programming will accelerate deployment considerably, which will bring substantial benefits to U.S. consumers and the competitiveness of U.S. industry. We do not have to resolve this debate, however, to conclude that the cable/telco cross-ownership restrictions should be eliminated. Removal of these restrictions, subject to appropriate safeguards,

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will ensure that technology and marketplace developments, rather than government fiat, will determine the capabilities of our future telecommunications infrastructure.

Competitive Safeguards

Although permitting telephone companies to offer video programming promises significant benefits for consumers, the Administration believes that entry by telephone companies into video services should be accompanied by competitive safeguards to ensure that the goal of greater competition in this market is achieved.

First, telephone companies should be required to enter the cable business de novo, rather than through acquisition of existing cable systems. Repeal of the cross-ownership restriction will not promote development of integrated, switched broadband networks if telephone companies can simply buy up the non-switched networks offered by the typical cable system. In the Administration's view, therefore, S. 2800 correctly bars telephone companies, under most circumstances, from acquiring existing cable systems.

However, the bill does not appear to preclude telephone companies from acquiring minority interests in cable systems. This seems an unwise policy because it could too easily permit agreements between these potential competitors not to compete,

but to "get along" and become partners. While such agreements may serve the interests of the contracting firms, the benefits for consumers are more obscure.

Additionally, in view of the benefits of a rule against telephone company acquisition of cable systems, waivers of that rule should be granted sparingly, so that its value in theory is not eroded in practice. In particular, if Congress decides to authorize a waiver where the acquiring telephone company promises to install new technology or expand capacity or services, the telephone company should be required, at a minimum, to provide both detailed plans and specific timetables for meeting their obligations.

The second major safeguard concerns regulations to prevent discriminatory practices and cross-subsidization by telephone companies with respect to their competitive video programming operations. This could be accomplished by directing the Federal Communications Commission ("FCC") to adopt specific regulations addressing these concerns.

Regarding safeguards against discriminatory conduct, one potentially effective means of achieving this goal would be for the FCC to permit telephone companies to enter the video marketplace subject to the FCC's Open Network Architecture ("ONA") policies. Pursuant to this approach, telephone companies

would provide underlying transmission facilities on a common carrier basis, while they would provide video programming services on a competitive, deregulated basis.

Both NTIA, the agency of which I am Deputy Administrator, and the Department of Justice have supported the ONA model adopted by the FCC in regulating provision of enhanced services by the Bell Operating Companies. By guaranteeing non-discriminatory access to the BOCs' underlying transmission facilities, ONA promises to foster competition in the provision of the many enhanced services that are built upon those transmission facilities. The FCC in the pending proceeding on its own "cable/telco" cross-ownership rules has suggested that a similar approach could produce significant benefits where telephone companies offer video services.

Apart from these specific comments with respect to non-discrimination, the Administration has two brief comments on safeguards generally. First, the safeguards adopted must not be too onerous. Here the best can certainly become the enemy of the good. Little will be gained if the potential benefits of telephone company entry into cable are undermined through overly rigid provisions.

Second, we recommend that Congress avoid attempting to specify detailed safeguards in this legislation.

Telecommunications is a dynamic, rapidly-changing industry. As a result, regulation of that industry must be sufficiently flexible to keep in step with the ever-changing market conditions. The legislative process is not well-suited to providing such flexibility. A better approach, on which Congress has relied heavily over the years, would be to allow the safeguards to be crafted by an expert administrative agency (in this case the FCC), pursuant to broad guidance from Congress on policy and careful oversight from Congress on implementation.

Other Provisions of S. 2800

S. 2800 makes two significant, and salutary, changes in current cable franchising practices. One provision specifies that where a telephone company only provides video distribution facilities to unaffiliated programmers on a regulated common carrier basis, neither the company nor its customers need have a cable franchise. A second bars franchising authorities from unreasonably refusing to award a second cable franchise. The Administration supports these changes because they will remove an existing barrier to entry by competing providers of video service to the home. In particular, to remove the specific prohibition on telephone company entry, while leaving current franchising practices intact, could simply move the debate over entry from Congress into the local franchising forum.

Conclusion

In the end, I note some irony in the current debate over cable regulation. In a sense, problems with the cable industry are a product of its own success. In the late 1970s and early 1980s, cable was somewhat of a video curiosity, an amalgam of broadcast channels, a few movie channels, and a lot of low budget news, music videos, and Australian rules football. In the last decade, through high-risk program investments and aggressive marketing, cable has transformed itself into a major force in the video marketplace. The 1984 Cable Act contributed significantly to that transformation.

This is not to say that this process has been free of problems. It does suggest, however, that in addressing these problems, Congress should not enact regulations that will dampen further growth and harm consumers. The Administration believes that S. 2800 is a sound and measured response to concerns about the current state of the cable industry.

That concludes my testimony. I will be happy to answer any questions you might have. Thank you.

Senator INOUYE. I thank you very much, Mr. Sugrue.

By this testimony, is the administration telling us that they are opposed to S. 1880, the cable legislation that this committee just reported out by an almost unanimous vote of 18 to 1?

Mr. SUGRUE. The administration is opposed to S. 1880, Senator.

Senator INOUYE. This is our tenth hearing on cable legislation. We have had nine hearings prior to this which were widely publicized. The administration was invited from day one. Why did you wait until hearing number ten to tell us you are against it?

Mr. SUGRUE. Well, the legislation has developed into a more concrete form. It has moved along to a point where passage is not just a hypothetical situation but something that is a potential reality. I think the attention of the administration was focused by the events and developments in Congress.

Senator INOUYE. You had never seen the Danforth bill before this?

Mr. SUGRUE. I have seen it and read the bills as they have come along. That is correct, Senator.

Senator INOUYE. You had no position to share with us?

Mr. SUGRUE. Our positions are shared initially in the administration through the interagency process in developing administration positions. That process was under way. It is generally a consensus process. Sometimes reaching immediate positions is not easy.

The administration did send two letters, one to the Senate and one to the House, on its views on the broad issues of rate regulation and access to programming. There was one to Senator Hollings on June 6 and one somewhat later to Congressman Dingell. At least the letter in the Senate did not have an apparent great effect, given the vote to which you just referred.

So the feeling in the administration was to go back and look at this issue more carefully and decide whether it needed to come out with a more specific and firmer position on the legislation.

Senator INOUYE. So you are against the reimposition of rate regulation?

Mr. SUGRUE. We are against the reimposition of new legislative rate regulation. Both NTIA and the Department of Justice have filed comments in the FCC's ongoing effective competition proceeding. As you know, Senator, under the Cable Act the standard for regulation is effect of competition, and that is a fairly, we think, common sense solid standard. If there was a problem with it, it may have been in the definition the FCC used, although I do not know that there was a problem at the time.

In NTIA's view, events have shown that some change in that standard is appropriate. I think that is virtually a unanimous position now. Even the cable industry in their comments have suggested that a change in that standard is appropriate.

Senator INOUYE. What are your thoughts on "must carry" customer service standards, technical standards?

Mr. SUGRUE. The administration has no formal position on those issues.

NTIA's view on "must carry" as reflected in our public comments before the FCC is that the better course would be not to reinstate "must carry" but to repeal the compulsory license and let

the marketplace work and let broadcasters essentially sell retransmission rights. That has been our position.

On the other hand, we recognize that "must carry" is a highly controversial issue and one of great import to many participants in the industry.

We understand that an industry compromise has either been reached or is about to be reached, and it would not be NTIA's view to oppose such a compromise.

Senator INOUYE. What about the video dial tone which your agency recommended in 1988? You are against that now?

Mr. SUGRUE. No. I do not view our present position as being against that. That was a major contribution to the policy debate at the time, and the fundamental and core concepts of that proposal I think remain solid.

Rather, what we are talking about here is, I think, an extension of that policy; that is, nondiscriminatory access to underlying facilities. Then the question is who can be a programmer on those facilities? In our view, allowing the telephone company to be a programmer subject to adequate safeguards, as members of the panel have already referred, would be a step in the right direction.

We were familiar with the video dial tone proposal when the new administration at NTIA took over. We very quickly came to the conclusion that that was a solid policy, but we wanted to examine it further to see whether any elaborations or refinements of it were necessary. This reflects the outcome of that.

Senator INOUYE. I have many, many other questions, but I would like to now recognize the senior Republican on the committee and the author of S. 1880, Senator Danforth.

Senator DANFORTH. Mr. Secretary, do you think that the cable television industry now is a competitive industry?

Mr. SUGRUE. I would say it is not fully competitive. It is not fully monopoly. It is one of those difficult-to-deal-with industries that is imperfectly competitive at the present time.

Senator DANFORTH. Let us take a community like Jefferson City, Missouri. Do you think it is partially competitive in Jefferson City, or how would you rank it as being between fully competitive and fully monopolistic?

Mr. SUGRUE. Well, two responses, Senator. I am not familiar with Jefferson City, Missouri. I can tell you the approach we took——

Senator DANFORTH. Jefferson City is one of the most famous cases in the country on cable TV. There is one cable provider, and it is in a very, very dominant position, I would think.

How would you describe the typical community where cable is provided?

Mr. SUGRUE. In our analysis of this issue in the FCC's context, our economists did a study of the relationship between rates and the factor that the FCC has adopted in defining effective competition; namely, the availability of broadcast signals. They did find an inverse correlation between the availability of broadcast signals—the more signals that are available, the lower the rates were.

Based on that finding, we recommended to the FCC, first of all, that, while not a perfect substitute by any means, that availability of broadcast signals as a standard for effective competition was a

workable standard. It had certain virtues to it of simplicity of application and would build on what the FCC had done already.

Senator DANFORTH. That is your view? That is, if people can get broadcast signals through the air, that serves as effective competition for cable television?

Mr. SUGRUE. Well, if by effective competition under the FCC standard the finding of the absence of it triggers local regulation of the cable system, it is our view that that is a better standard if the tradeoff is——

Senator DANFORTH. You are here testifying at long last about the position of the administration. Is it the position of the administration that broadcast signals through the air constitute effective competition for cable television?

Mr. SUGRUE. Senator, I would say the position of the administration is that it does not support or see the need for the comprehensive type of regulation in S. 1880 which——

Senator DANFORTH. I understand that, but that is not my question.

My question is do you believe that there is now competition. You have said maybe yes, maybe no, somewhere between competition and no competition. I am asking you on what basis you could say that there is competition?

Mr. SUGRUE. On the basis of the studies we did and which the Department of Justice did which are reflected in our filings, both departments independently came to the conclusion that a standard that would define effective competition as the availability of another multi-channel provider was not an appropriate standard.

Now Justice went a little——

Senator DANFORTH. That is the administration's position? That is not the standard you are following, the availability of a multichannel provider?

Mr. SUGRUE. Senator, the administration's position is fairly broad on this.

Senator DANFORTH. I am trying to figure out what reason there is for you to oppose S. 1880, and I believe your testimony is that whether there is another multichannel provider is something that is not of great consequence to you but that the availability of over-the-air broadcast signals does constitute effective competition.

Mr. SUGRUE. For the purpose of reregulating the cable industry, our view is that a broadcast standard is appropriate. The Department of Justice had a slightly different cut on that.

Senator DANFORTH. What is the Administration's position? The Administration's position, as I understand it, is that the availability of broadcast signals over the air does constitute effective competition, therefore the standard which is applied in S. 1880 is not the appropriate standard. The standard in S. 1880 is that there has to be another multichannel provider. And in the absence of competition by another multichannel provider, then there is at least the authority for local municipalities to regulate.

But your view is different from that, as I understand it. Your view is that if you can turn off the cable mechanism and flip on over-the-air, then that constitutes effective competition?

Mr. MAHER. Senator, the Administration views the entry of telephone companies under the general terms of the Burns proposal as

one way of assuring that such multichannel competition will occur in the long term.

Senator DANFORTH. Can they now get in the business? Is there competition now?

Mr. MAHER. Excuse me, Senator?

Senator DANFORTH. The reason we have this bill before us is they cannot do that now, correct?

Mr. MAHER. Well, that is correct. Now that is a longer——

Senator DANFORTH. The way S. 1880 is written is not in the event there is another multichannel provider, then the alternative of regulation is no longer with the municipality. So the Burns provision, if that were to become law, and if multichannel providers were available in a community, would serve, would it not, to obviate the problem?

Mr. MAHER. The Administration's position is that the existing FCC process, their existing proceeding, trying to redefine this effective competition standard, is the proper means, not the writing into legislation of a particular definition of effective competition. Because the marketplace has changed.

Senator DANFORTH. Can I just suggest to you that if you believe that another multichannel provider constitutes effective competition, that would seem to me to be the rationale for the position that you are now taking, which is supporting the Burns bill. I support the Burns bill.

If, on the other hand, you believe that grabbing signals out of the air is effective competition, why is that not sufficient? My understanding of Secretary Sugrue's position is that broadcast signals constitute effective competition.

Mr. SUGRUE. I think, Senator, when I said the market was not perfectly competitive or perfectly monopolistic—this is a situation—we are not comparing perfect competition with perfect regulation. The consequence of defining effective competition in the way you suggest would be to reregulate virtually 100 percent of the cable systems in the country.

It is the Administration's view that would be counterproductive and unnecessary.

Senator DANFORTH. You know it is conditional reregulation. If you had the Burns bill, if there was more than one provider, if microwave was provided, then that would constitute effective competition. We are not in the business of reregulating for the joy of it.

Mr. SUGRUE. I understand.

Senator DANFORTH. We are in the position of offering the possibility of reregulation if there is no other multichannel provider.

Mr. SUGRUE. I understand, Senator.

Senator DANFORTH. You do not disagree with that concept, do you?

Mr. SUGRUE. I certainly do not. And the provision in the bill as you spelled it out that would result in regulation going away when a multichannel provider is in a community, I think is one of the salutary points of your bill.

Senator DANFORTH. It is the basic concept of the bill.

Mr. SUGRUE. I understand. Some other legislative proposals do not have that provisions in it, and I——

Senator DANFORTH. You are here to testify, among other things, against S. 1880. Let me just ask you this simple question, because I have taken more than my time, is it the position of the Administration that broadcast signals constitute effective competition?

Mr. SUGRUE. It is the position of the Administration that the presence of another multichannel provider in a community or the absence of a second multichannel provider should not be the trigger for reregulation.

Senator DANFORTH. I understand that. Let me ask you the question in a different way. Is it the position or is it not the position of the Administration that over-the-air broadcast signals constitute effective competition for cable television?

Mr. MAHER. Just a point on that specific question that both NTIA and the Department of Justice answered in the FCC proceeding. Both NTIA and the Department included the number of broadcast signals as being one determinant in effective competition. NTIA said——

Senator DANFORTH. What other is there? If there is no multichannel provider, then what other conceivable competition is there, other than over-the-air broadcast? It is not just one determining factor. In your view, it either is or is not. It is not partial competition. Now which is it? Is it the position of the Administration that over-the-air broadcast does or does not constitute effective competition for cable television?

Mr. SUGRUE. I think what Mr. Maher was trying to point out was that the Department Justice suggested a few other factors in addition to the availability of over-the-air signals, such things as the number of subscribers to basic service versus the number of subscribers to other services. The Administration has not decided whether the NTIA position, which is as you describe it, that for purposes of imposing reregulation, over-the-air signals, by itself, is the appropriate standard.

However, the Department of Justice approach would factor in a few other things. It has reached the position in its opposition to S. 1880 that the presence of a multichannel provider should not be the trigger for that.

Senator DANFORTH. Therefore, it is the position of the Administration that an over-the-air broadcast signal constitutes effective competition?

Mr. SUGRUE. Can constitute effective competition.

Senator DANFORTH. Well, I cannot think of any other way to clarify the situation, Mr. Chairman.

Senator INOUYE. Thank you.

Senator Gore.

Senator GORE. Thank you very much, Mr. Chairman.

Maybe you did not ask about Nintendo.

I will not belabor this. I know that we have a long witness list. I do just have a couple of questions that follow right along the same lines that Senator Danforth has been pursuing. You state in your testimony that, in effect, the Administration opposes the cable legislation passed by this Committee because it "reimposes rate regulation and regulates the relationship between programmers and cable operators, rather than promoting competitive entry."

Now this means that the Administration supports competition in the cable marketplace. That is the implication.

Mr. SUGRUE. Yes, sir.

Senator GORE. Other than telephone company entry into cable, what forms of competition do you support, satellite dishes?

Mr. SUGRUE. Certainly, sir.

Senator GORE. Wireless cable?

Mr. SUGRUE. Yes, sir.

Senator GORE. New DBS services?

Mr. SUGRUE. Yes, sir.

Senator GORE. Are you aware of how the marketplace works for or against these competitors to cable?

Mr. SUGRUE. Well, sir, are you getting to access to programming?

Senator GORE. Yes, for example.

Mr. SUGRUE. The Administration's position on that is it is interested in promoting competition, but has not seen the case made yet that government-mandated access to programming would serve the public interest. We have seen in the programming market over the last 10 years a great array of valuable programming being developed.

Indeed, as I indicated in my oral statement, we would not be here today if that programming was not valued by American consumers. Back in the early 1980s when my community was first cabled, it was a rather close call at $10 a month whether I wanted the service. There was not much to it. Ten years later, at $20 a month, it is a much more valuable service to me. I was sort of almost indifferent at half the price. And the reason for that is that the value delivered has increased.

I think that has been one of the great success stories of communications policy in this decade. And I think we are just reluctant to interfere with that marketplace that has done so well on the programming side.

Senator GORE. Are you familiar with the fact that cable programming is often denied to the competitors of cable, except at—well, sometimes denied altogether, but routinely denied except at rates up to 400 percent higher than the rates that prevail in the relationship with the cable industry itself? Are you familiar with those figures?

Mr. SUGRUE. Yes, sir. We have met with some people who have provided those figures.

Senator GORE. Does that trouble you at all?

Mr. SUGRUE. It troubles us, certainly, to the extent that it was undertaken for anti-competitive reasons to limit competition.

Senator GORE. Well, that is the reason. I mean there is no mystery about it. That is the reason.

Mr. SUGRUE. Well, the provisions that permit someone who develops programming to have an exclusive right to it, and to sell it under conditions that serve their commercial interests, again, are policies that have served us well. And I think one has to proceed with some caution in this area.

Senator GORE. Well, let us take the example of someone who is an independent programmer, who sells to the cable industry and also to the satellite dish industry, and other competing distributors. And the cable industry makes up more than 90 percent of this pro-

grammer's revenue. That industry is the biggest single customer for the programmer. If that biggest customer comes to the programmer and says, look, I am getting worried about these new competitors, satellite dishes and wireless cable, and others, if you do not raise your wholesale rates to my competition by 400 percent, I am going to stop doing business with you and you will go bankrupt. Would that trouble you?

Mr. SUGRUE. Yes, sir.

Senator GORE. Well, that essentially happens on a regular basis.

Mr. SUGRUE. Well, what you have described, as I understand it, would be a violation of the antitrust laws.

Senator GORE. Only if it is prosecuted. And the Bush Administration, like the Reagan Administration before it, does not appear, and I hope that I will be proven wrong about this, but it does appear to be sufficiently interested in prosecuting the antitrust laws in this particular situation, to give them any real meaning.

Mr. SUGRUE. I do not want to speak particularly for the Department of Justice, but I do not think that particular characterization of the Antitrust Division of the Department of Justice is correct.

Senator GORE. Well, as I say, I hope that I am proven incorrect, and I know that there have been some moves within the Justice Department to at least take a look at this in the new Administration, and I hope that they will, but I am not going to hold my breath because I have seen some of the same people involved in the study, and I am frankly very concerned about it.

Now, that is why—and I am going to wind up with this, Mr. Chairman. I know we have got to move on, but when you say that your preferred approach is to promote competitive entry in the marketplace, and everybody in the industry knows that there is one big problem, one 800-pound gorilla that prevents competitive entry in the marketplace and that is anticompetitive restrictions on access to programming, and you look the other way and pretend that 800-pound gorilla does not exist, then it drains all the meaning out of your statement that you are in favor of promoting competitive entry into the marketplace. You see what the problem is.

So that is why, as Senator Danforth's questions are so pointed and significant, because you are using a faulty standard for what is a competitive marketplace. Out in my area of the country, and where Senator Ford is from, we have got—and other members of the Committee have similar situations.

You have got people that technically get broadcast signals but they are a little fuzzy. They are out in rural areas. They do not come in that well. Then you have got their city cousins with this plethora of information services over the cable, and they come out there in the rural areas and just fleece them. Just fleece them. Everything the market will bear. Competition is the preferred solution, but you all really are not supporting that in reality, with all due respect.

Thank you very much, Mr. Chairman.

Senator INOUYE. Thank you. Senator Burns.

Senator BURNS. Thank you, Mr. Chairman. I think what we will boil down to here, what we are trying to define, is effective competition, and I think what should be brought to life here is that we

were told whenever, the debate over S. 1880, the cable bill, that this was a killer amendment when we offered it as an amendment.

I think what we want to get here, and after your testimony, is that you support this bill and you also support—the Administration supports the competitive approach to this legislation. Are you telling us here now that if there is not, maybe, a stronger competitive message in the S. 1880 bill—would the advisors to the President advise a veto?

Mr. SUGRUE. Well, the Administration has not reached that issue, but I can tell you that the Department of Commerce would recommend a veto under those circumstances, yes.

Senator BURNS. Then let us be very clear. Your position in regard to my bill, the Administration position, not only contains that—do you think we contain adequate safeguards in S. 2800 then?

Mr. SUGRUE. We think the safeguards issue would be best left to the FCC pursuant to overall guidance from Congress. I mentioned the open network architecture policies at the FCC. That is and up and running set of policies that we think would be well designed, or could be modified if necessary. That would well serve, I think, the goals of the Burns bill for telephone company entry.

Senator BURNS. What if this S. 2800 was allowed as an amendment on the cable bill now? Would they take a different view of that?

Mr. SUGRUE. Well, we have not addressed that question, but that would certainly be a different kettle of fish. We would have to look at that very carefully.

Senator BURNS. That is about all the questions I have. Thank you very much. I appreciate that.

Senator INOUYE. Thank you. Senator Ford?

Senator FORD. Thank you, Mr. Chairman. Let me see if I can get this straight, now. You support S. 2800?

Mr. SUGRUE. Yes, sir.

Senator FORD. Or the Administration does. I like that. That means more power. But you oppose S. 1880?

Mr. SUGRUE. Yes, sir.

Senator FORD. Let me ask you this. If S. 1880 does not become law, what good is S. 2800?

Mr. SUGRUE. S. 2800 removes the current barrier in the Cable Act of 1984 to entry by one particular and potentially potent competitor, the telephone companies.

Senator FORD. I thought S. 1880 set that groundwork, and the policy for the FCC, and that S. 2800 imposed different points as it relates to new entrants?

Mr. SUGRUE. Senator, my understanding of S. 1880 is it does not address telephone company entry.

Senator FORD. Well, it addresses competition though, and we are addressing, then, the competitor, are we not?

Mr. SUGRUE. Yes, sir.

Senator FORD. Well, hot dog, we got a yes.

You talk about FCC now. Of course, they are supposed to be the—we are supposed to be the Board of Directors, and they are supposed to be the Executive Officers. We set the policy, then, and

you want FCC to carry that out. Do you see anything wrong with the policy of S. 2800?

Mr. SUGRUE. Not in its broad policies. We think the goals there are very good.

Senator FORD. Well, I am personally for S. 2800, and I supported S. 1880, and I think we need both.

I think Senator Gore pointed out a problem that I have, and where I have mountains, other states have wide areas. We basically can receive telephone service, but we cannot get television unless we buy a dish, and then if we buy a dish, then somehow or another we have to go to the cable company to get the digits put in so we will not be scrambled, and so we wind up right back where we were.

We have an area in Kentucky that has had horrendous cable service. In fact, three counties have the same cable service, and it has been very, very bad. Those three counties formed a commission to attempt to bring competition into the area, and of course the present cable operator filed suit and got an injunction.

We find many residents within the area of the franchise that are without television unless they get it over the air. It may be on the next block, but it may not be there. This new commission tried then to find another company that would serve those who were not being served, and we find it very difficult to do.

So I think the telco entry has a great deal of potential. I think that telephone companies will give us unanticipated breakthroughs as it relates to new technology that would improve our prospects. I think they are the kind that if you worry about them, well, you worry about better coverage, clearer pictures, everything I believe that you could expect or want, and competition could come from them.

So I would hope that if you would go back and talk to your powers that be—and I agree with Senator Gorton. There may be a little fine tuning in S. 2800. I do not think anybody is wed in concrete to this one. For lack of a better suggestion, I am going to be for it. If somebody has a better suggestion—and Senator Burns and I both have talked about the possibility of pride of authorship here. We just need this piece of legislation.

We need it for the rural areas, and they deserve—those kids deserve as much as the urban kid does, because you know where may be the answer to cancer out there, and if we can whet their appetite through telephones, or computers, or television, or FAX machines or whatever, you would be surprised what you might find out in the rural area. So that is the heart and guts of my support of this particular legislation.

Thank you, Mr. Chairman.

Senator INOUYE. Thank you. Senator Exon?

Senator EXON. Mr. Chairman, thank you very much.

Mr. Secretary, let me return to what I mentioned in my opening statement, and I am wondering how much thought has been put into this, or whether there is a concern or not. Do you remember a few years ago we broke up the Bell System, rightly or wrongly, because they were a monopoly?

If the Burns bill becomes law, do you see any potential problem with regard to the fact that with the Bell System providing all of

the local service? Do you believe that they would become so strong that they would also control all, or essentially all, of what we now refer to as cable?

In addition to that, I am sure that there are other legitimate enterprises that will use the wire, when we get the new wire put in place. That is going to have almost unlimited channels. Are there any safeguards, or do you think it is just something we should not worry about now, that the RBOCs could collectively become the Bells of a few years ago that were broken up because of what was perceived as the monopolistic procedures in pricing?

Mr. SUGRUE. I understand your concerns, Senator. I think, however, the policies reflected in the Burns bill and the policies that have been adopted at the FTC to which I referred, for example, like open networks, are well designed to promote competition and to let the telephone companies realize technological efficiencies in transmission and let the provision, though, of video services or other information services be done on a fully competitive basis.

The basic fundamental policy reflected in those approaches is that you try to separate what may be a monopoly or natural monopoly part of the business or facility from the competitive part. The FCC has sort of a long history in implementing this type of policy. This goes back to its approach to terminal equipment back when it first deregulated that or permitted customers to hook in their own equipment back in 1968 through the development of its policies for such things as enhanced services and inside wire.

The application of open networks I think would work very well in this case, and I think it is one area that as a matter of telecommunications policy has received a lot attention around the world. The European Community has adopted a program called open network provisioning. The Japanese have just announced a policy along similar lines called open network doctrine.

So those are perfectly good and sound concerns, but the bottom line is no, I do not think that that scenario would play out, and I think the safeguards are in place. To the extent they need to be further refined, that could be done as well.

Senator EXON. I am not saying that history is going necessarily to repeat itself, but I do remember sitting at this table a very limited number of years ago when cable was a fledgling operation, as you referred to in your statement. It is not a fledgling operation anymore. It has been magnificently successful. That is the good side.

The bad side of that is that there are some legitimate complaints about the quality of service in certain areas, and there are some very legitimate complaints that Senator Gore and others have exercised with regard to rate increases.

I would like to have you state how you feel about this. There seems to be a concern in some quarters that the resources of the RBOCs would make them that new 1,200 or 1,500 or 1,800 gorilla because they would not only control the fiber optics cable in certainly more than sufficient quantity, 25 percent of fiber optics as outlined in Senator Burns' bill, but because of their deep pocket and their ability to put money into production and so forth and so on that they indeed would become another gorilla.

I would just press you once again. Have you studied that? Is or is that not a concern? I am not sure.

Mr. SUGRUE. If it is a matter of improper cross-subsidies, it is a concern. That is what I think the Burns bill addresses. The FCC has a program. The states all have a program. The Burns bill would direct the states and the FCC to work together to develop a coherent program that could be more effective.

If it is a matter of just deep pockets that they would invest in this area, I am not sure that that is not a good thing. I have seen material circulated that is almost critical of the fact that the telephone companies invested $23 billion in infrastructure last year. Frankly, for a country our size and an industry that size, that is not a terribly large amount. The Europeans in the European Community with a somewhat larger but not much larger population invested almost twice that amount.

I think one of the virtues of this approach is that we would stimulate further investment in national infrastructure and telecommunications.

Senator EXON. One last question. Looking to the future, what has been your position or the administration's position, if there is one, on wireless type cable?

You know, this whole communications field is moving so rapidly and progress is so dramatic. What do you foresee ten years down the road? Would there be wireless facilities, wireless cable with a small dish or antenna up on the top of the house that could be channeled in off a satellite, that would cause further problems in this whole area for the consumer with regard to the telephone companies and the cable people as of today who are quarreling among themselves and who might have deep, deep problems with wireless cable or wireless communications?

Is that a potential problem, or is that something that we need not address at this time?

Mr. SUGRUE. I do not view it as a potential problem. Indeed, even apart from video services, the development of wireless communications some project might be the technological development that finally breaks the hold on the local bottleneck. There are systems that the FCC has approved for personal communications systems for trial experiments in two cities in the U.S. that, if they work as their promoters say they will—and that is what the trials are for—could provide an alternative way of using the telephone.

I think on the video side certainly those developments are good ones; but as you point out, Senator, the factors that influence developments in this industry are very complex. There are a lot of big players and major investment decisions being made. In addition to that, governmental policy, legislation and FCC also play a major role.

So I would hesitate to predict 10 years from now where we would be on that.

Senator EXON. Thank you, Mr. Sugrue.

Thank you, Mr. Chairman.

Senator INOUYE. Thank you.

Mr. Sugrue, am I correct in assuming after listening to your statement that you or the administration would favor repealing the cable-television cross-ownership law?

Mr. SUGRUE. Yes, sir.

Senator INOUYE. You would favor that?

Mr. SUGRUE. I am sorry. With appropriate safeguards, if that is the question.

As outlined in the Burns bill which has the effect of repealing that restriction and permitting entry subject to safeguards, yes.

Senator INOUYE. I would like to make the following observation. We have had 10 hearings. This is our 10th. We have listened to over 80 witness over 50 hours. In addition to that, there have been countless hundreds of hours of negotiation. On the evening of June 6, the day before the markup, this letter was received by the committee. It is three short paragraphs signed by the Secretary of Commerce and the Assistant Attorney General, Department of Justice. This is the administration's contribution.

We are writing to inform you of the administration's views on pending cable legislation in the Senate.

The second paragraph:

The administration opposes the current legislative proposals for reregulation of the cable-television industry. It has been the consistent position of the administration that competition rather than regulation creates both the most substantial benefits for consumers and the greatest opportunities for American industry. We believe that the current proposals pending before the Senate for the most part do not sufficiently emphasize competitive principles such as promoting new entry and would impose unnecessary regulation upon cable systems and their relationships with alternative video delivery systems and programmers.

The last paragraph, Since its deregulation in the Cable Act of 1984, the cable industry has developed rapidly and brought substantial benefits to the consumer. Current reregulatory proposals put these gains at risk. Increased competition offers a superior means of promoting consumer interest.

Sincerely.

This is what the administration sent us. I do not suppose you would seriously expect the committee to have seriously considered this as a contribution to our debate, do you?

Mr. SUGRUE. Well, Senator, we hoped you would. It was sent with that in mind.

Senator INOUYE. Well, next time if you have such strong positions to take, I would hope that the administration will participate in our deliberations and our debate and not wait until the 10th hearing to come forth and favor us with your position.

Any further questions?

[No response.]

Senator INOUYE. If not, I thank you very much, Mr. Sugrue.

Mr. SUGRUE. Thank you, sir.

Senator INOUYE. Our first panel consists of the President of Standard Telephone Company of Cornelia, Georgia, Mr. Dean Swanson; the Chairman and Chief Executive Officer of Continental Cablevision, Incorporated of Boston, Mr. Amos Hostetter; the President of LIN Broadcasting of New York, Mr. Gary R. Chapman; the President of Washington Post Company of Washington, Mr. Richard D. Simmons; and the publisher of Morristown Citizen Tribune and President of Lakeway Publishers of Morristown, Tennessee, Mr. Jack Fishman.

Gentlemen, I thank you for joining us this morning. Once again, my apologies for delaying this. As you know, we had a very important debate and a vote this morning.

I gather Senator Gore wishes to say something before we proceed.

Senator GORE. Mr. Chairman, I am very pleased to welcome the last witness on this panel, Jack Fishman, to the committee today. Mr. Fishman is one of my state's most prominent publishers and businessmen, active in civic and charitable affairs throughout Tennessee, especially East Tennessee. He is also a close personal friend, and I appreciate the hospitality of the committee in asking Mr. Fishman to be with us here today. I know we will benefit from his testimony later in the panel.

Senator INOUYE. Thank you.

May I now call upon Mr. Swanson.

STATEMENT OF DEAN SWANSON, CHAIRMAN OF THE BOARD, U.S. TELEPHONE ASSOCIATION

Mr. SWANSON. Good morning, Mr. Chairman, members of the Committee. My name is Dean Swanson. I am appearing before the Committee on behalf of the United States Telephone Association, for which I serve as Chairman of the Board of Directors. I am also President of Standard Telephone Company, which is located in Cornelia, Georgia.

Mr. Chairman, there is a growing awareness that America's telecommunications infrastructure may not be advancing fast enough to maintain our Nation's competitive edge in world markets, nor to bring the benefits of the information age to all of our country's citizens in timely manner. There are two fundamental reasons for concern over infrastructure development. One is a very aggressive national focus that the advanced countries in Europe and Asia are taking with respect to enhancing their telecommunications networks. Their pace of development has accelerated markedly as they seek to position themselves for advantage in world markets.

Secondly, the pace of U.S. infrastructure development has been impeded in recent years by well-intentioned but ultimately counterproductive constraints imposed on telephone companies by current public policies. The constraint relevant to today's proceeding is a prescription against provision of video programming by the 1984 Cable Act.

This constraint, while aimed at promoting competition, has missed the mark and protected the cable monopoly instead. It bars an important contributor, the telephone industry, from market participation and new service opportunities, which would accelerate the deployment of an advanced national telecommunications infrastructure.

If America is to keep pace in the increasingly competitive global economy, and equally important, if we are to bring the information age to America's urban and rural areas, we must remove this arbitrary and misplaced barrier on the local exchange carrier's ability to compete. S. 2800 provides the much needed first step.

However, I did not come here to bash cable. The problems within the existing cable infrastructure are well documented.

I come with a positive message to highlight a vision, shared by many members of this Committee, of a universal available broadband fiber optic public switched network.

Cable proponents maintain that all services except full motion video can be delivered over copper, and consequently that video delivery should be left to the cable industry. Two, that cost of fiber is too expensive, and there are no safeguards against cross-subsidization. Three, there can be no protection against cross-subsidization if telephone companies are permitted to compete.

Each of these arguments should be recognized for what they are: protectionist pleadings, but certainly not the truth.

Copper and coaxial cable in its current system architecture cannot provide switched two-way high definition video and the myriad of services a fiber network can offer. A switched, fiber-based video system offers a residential consumer a wide range of viewing options, and the ability to control his or her access to television or alternative services.

It is important to note that the educational, medical, and business-related benefits which come with switch-fiber deployment are not, and most likely will not, be available from direct broadcast satellites or wireless cable.

Our detractors say that fiber is too expensive. Just last June cable proponents released a study stating that it would cost almost $900 billion to wire this country. Today, even they agree that the number is probably closer to $200 billion.

The telephone industry's commitment to improve the existing infrastructure is demonstrated in its annual expenditures of some $20 billion to upgrade the Nation's telecommunications infrastructure. Cost for the deployment of fiber have fallen and will continue to fall, but we must not forget that there is already an established safeguard in place. The individual state public utility commissions will not allow us to fully deploy fiber until it is cost justified.

Finally, Mr. Chairman, as to the claims of our detractors that we will cross-subsidize and that no level of government can properly police against cross subsidies, we would cite the comments of FCC Chairman Sikes, and the numerous state utility commissions that have stated that they would have no problem policing against cross subsidies. Indeed, they are doing it today because telcos are already involved in unregulated businesses.

The independent telephone companies, for example, are currently subject to annual audit by one, the State Public Utility Commission; two, the National Exchange Carrier Association; three, the State Exchange Carrier Association; and four, AT&T and other long distance carriers. My company is further subject to an audit every two years by the REA.

To now claim that we cannot enter a new field because of the fear of cross subsidies is either naive or disingenuous. Even Dr. Leland Johnson, an anti-telco entry advocate, who will testify later, states in his most recent study, ""Cross-subsidization by telephone companies seeking to compete with cable operators is unlikely because the amounts of subsidy required would be large and easy for regulators to spot.""

I agree with that statement.

While we strongly believe that additional safeguards are not needed, in an effort to better serve our customers and respond to the concerns of Congress, we are more than happy to discuss additional consumer and competitor protections. We are more than

willing to accept the very strong safeguards required by us in Senator Burns legislation, including the death penalty of divestiture of the cable subsidiary upon the finding of a willful cross subsidy. We only ask that this Committee remember that we will be competing against a vertically integrated, firmly entrenched industry, which is unregulated, free to cross-subsidize, and unlimited in their ability to vertically integrate.

The telephone industry's vision is of a diverse and competitive cable environment that provides benefits not only to the viewing public, but strengthens this Nation's global competitiveness. This is an environment that this Committee has the opportunity to hasten with the passage of S. 2800, the Communications Competitiveness and Infrastructure Modernization Act of 1990. By permitting telco competition, S. 2800 would put downward pressure on cable rates by introducing competitive market forces, increase viewing options as more cable providers enter the market, provide financial incentives to accelerate the deployment of fiber optic technology to the whole Nation, and speed the day when all Americans in rural and urban communities have available to them the newest of communications essentials, cable television.

In conclusion, Mr. Chairman, if the Nation's telecommunications infrastructure is to progress at an adequate pace, public policies must be changed to not only remove the arbitrary barriers telephone companies now face, but policy must be changed to foster conditions that promote the deployment of an advanced infrastructure and new services. We believe that this approach is the greatest strength of the Burns telco/cable approach. S. 2800 is legislation that is cognizant of the broad context of infrastructure issues, such as universal deployment, efficiencies, and timely deployment.

We are eager to compete, and it is in the Nation's long-term national interest to permit the telecommunications industry to compete. Not just to control rates and quality of service to cable television customers, but more importantly, for our Nation's long-term economic well being.

Both the Congress and U.S. industry have been rightfully criticized for failing to plan for the long haul. Here is an opportunity for Congress to unleash American industry to compete and indeed participate in a technology of the next century. By endorsing the competitive resolution to cable proposed in S. 2800, this Committee will do much more than merely permit telco entry into cable. You will allow this Nation to prepare for the economic and social challenges of the next century with new vigor and the newest of tools, a modern, competitive information infrastructure.

Mr. Chairman, there is no public interest to be served by precluding my company or any telephone company from becoming a partner in the provision of new services. I hope that my testimony has made clear the public policy benefits to be achieved by allowing telco entry, and I hope that this Committee will act favorably on S. 2800.

Thank you.

[The statement follows:]

STATEMENT OF DEAN SWANSON

CHAIRMAN OF THE BOARD

UNITED STATES TELEPHONE ASSOCIATION

GOOD MORNING, MR. CHAIRMAN, MEMBERS OF THE COMMITTEE. MY NAME IS DEAN SWANSON. I AM APPEARING BEFORE THE COMMITTEE ON BEHALF OF THE UNITED STATES TELEPHONE ASSOCIATION FOR WHICH I SERVE AS THE CHAIRMAN OF THE BOARD OF DIRECTORS. I AM ALSO PRESIDENT OF STANDARD TELEPHONE COMPANY LOCATED IN CORNELIA, GEORGIA.

THE UNITED STATES TELEPHONE ASSOCIATION, OR USTA, IS THE PRIMARY TRADE ASSOCIATION OF THE LOCAL TELEPHONE INDUSTRY. THERE ARE 1,359 LOCAL TELEPHONE COMPANIES IN THE UNITED STATES, OF WHICH ALMOST 1,100 ARE MEMBERS OF USTA. USTA'S MEMBERSHIP INCLUDES EACH OF THE LARGEST 33 LOCAL TELEPHONE COMPANIES, AND ALL BUT TWO OF THE LARGEST 50. EACH OF THE BELL OPERATING COMPANIES DIVESTED BY AT&T BECAME A MEMBER OF USTA AT DIVESTITURE. THE MEMBERSHIP OF USTA INCLUDES NEARLY 1,000 QUITE SMALL TELEPHONE COMPANIES, EACH OF WHICH SERVES LESS THAN 20,000 LOCAL ACCESS LINES. THE ASSOCIATION ITSELF HAS ROOTS THAT STRETCH BACK TO 1897.

I. INFRASTRUCTURE CONSTRAINTS

BEFORE I ADDRESS THE SPECIFICS OF SENATE BILL 2800, AND WHY USTA IS SO SUPPORTIVE OF IT, IT MAY BE HELPFUL TO OUTLINE THE BROADER INFRASTRUCTURE CONTEXT INTO WHICH THIS VITALLY IMPORTANT LEGISLATION FITS.

THE NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION HAS UNDERTAKEN AN INQUIRY INTO THE ROLE OF OUR NATION'S TELECOMMUNICATIONS INFRASTRUCTURE. THE IMPETUS OF THIS INQUIRY,

AND, INDEED, ONE OF THE DRIVING FORCES OF THE TELCO CABLE EFFORT, IS A GROWING AWARENESS THAT AMERICA'S TELECOMMUNICATIONS INFRASTRUCTURE MAY NOT BE ADVANCING FAST ENOUGH TO MAINTAIN OUR NATION'S COMPETITIVE EDGE IN WORLD MARKETS, NOR TO BRING THE BENEFITS OF THE INFORMATION AGE TO ALL OF OUR COUNTRY'S CITIZENS IN A TIMELY MANNER.

USTA'S FILING IN THE NTIA INQUIRY, AND THOSE OF THE INDIVIDUAL TELEPHONE COMPANIES, DEMONSTRATE THAT DESPITE THE SUBSTANTIAL DEVELOPMENT EFFORTS THAT ARE GOING FORWARD, THE U.S. MAY NOT BE RETAINING ITS DOMINANCE IN THE PROVISION OF TELECOMMUNICATIONS SERVICES.

THERE ARE TWO FUNDAMENTAL REASONS FOR CONCERN OVER INFRASTRUCTURE DEVELOPMENT. ONE IS THE VERY AGGRESSIVE, NATIONAL FOCUS THAT THE ADVANCED COUNTRIES IN EUROPE AND ASIA ARE TAKING WITH RESPECT TO ENHANCING THEIR TELECOMMUNICATIONS NETWORKS. THEIR PACE OF DEVELOPMENT IS ACCELERATING MARKEDLY AS THEY SEEK TO POSITION THEMSELVES FOR ADVANTAGE IN WORLD MARKETS. SECONDLY, THE PACE OF U.S. INFRASTRUCTURE DEVELOPMENT HAS BEEN IMPEDED IN RECENT YEARS BY WELL-INTENTIONED, BUT ULTIMATELY COUNTERPRODUCTIVE CONSTRAINTS IMPOSED ON TELEPHONE COMPANIES BY CURRENT PUBLIC POLICIES.

THERE ARE A NUMBER OF SOURCES OF CONSTRAINTS IMPOSED ON LECS THAT IMPEDE THEIR EFFORTS TO DEPLOY AN ADVANCED INFRASTRUCTURE. EXAMPLES ARE CONSTRAINTS ON THE PROVISION OF VIDEO PROGRAMMING FROM THE 1984 CABLE ACT, CONSTRAINTS ON THE INTEGRATED PROVISION OF ENHANCED AND INFORMATION SERVICES IMPOSED BY THE FCC'S COMPUTER

INQUIRIES, CONSTRAINTS ON NEW SERVICE INTRODUCTIONS IMPOSED BY RIGIDITIES OF THE REGULATORY PROCESS AT BOTH THE STATE AND FEDERAL LEVELS, CONSTRAINTS IMPOSED BY REGULATION ON THE TIMELY RECOVERY OF INVESTED CAPITAL, AND CONSTRAINTS IMPOSED BY THE MFJ.

MANY OF THESE CONSTRAINTS, WHILE AIMED AT PROMOTING COMPETITION HAVE MISSED THE MARK BY PROTECTING MONOPOLIES INSTEAD. THEY WITHHOLD IMPORTANT CONTRIBUTORS -- TELEPHONE COMPANIES -- FROM MARKET PARTICIPATION AND NEW SERVICE OPPORTUNITIES THAT WOULD INCENT THE MORE-RAPID DEPLOYMENT OF AN ADVANCED TELECOMMUNICATIONS INFRASTRUCTURE.

THE TELEPHONE INDUSTRY ROLE IN THIS IS IMPORTANT TO OUR WHOLE SOCIETY, AS TELEPHONE COMPANIES SERVE NOT ONLY AS THE FIRST POINT OF INTERCONNECTION FOR THE OVERWHELMING MAJORITY OF USERS, BUT ALSO AS THE PROVIDERS OF THE UNDERLYING INFRASTRUCTURE USED BY MYRIAD COMPETITIVE SUPPLIERS OF ENHANCED AND INFORMATION SERVICES. IF WE ARE TO KEEP PACE IN THE GLOBAL MARKET WITH OTHER ECONOMICALLY ADVANCED COUNTRIES AND, EQUALLY IMPORTANTLY, IF WE ARE TO BRING THE INFORMATION AGE TO AMERICA'S SUBURBAN AND RURAL AREAS WE MUST REMOVE THESE ARBITRARY AND MISPLACED BARRIERS ON LOCAL EXCHANGE CARRIER'S ABILITY TO COMPETE. S. 2800 PROVIDES THE MUCH NEEDED FIRST STEP.

IF TELEPHONE COMPANIES ARE PERMITTED TO COMPETE WITH EXISTING CABLE COMPANIES, THERE IS NO GUARANTEE THAT OUR VENTURE BE SUCCESSFUL, BUT THERE IS NO DOUBT THAT EVEN THE THREAT OF COMPETITION WILL BENEFIT CABLE CONSUMERS.

II. CHANGES IN TECHNOLOGY, CONSUMER NEEDS AND THE NEED TO RESPOND TO GLOBAL MARKET CHALLENGES WARRANT AMENDMENT OF THE CABLE ACT TO PERMIT TELCO PROVISION OF CABLE.

WHILE THIS COMMITTEE WAS GUIDED BY WHAT IT BELIEVED TO BE THE BEST INTEREST OF THE CONSUMER AND NATION IN 1984, CIRCUMSTANCES HAVE CHANGED SIGNIFICANTLY IN THE INTERIM. IT IS NOW IMPERATIVE THAT TELCO ENTRY BE NOT ONLY PERMITTED, BUT ENCOURAGED. THESE CHANGED CIRCUMSTANCES INCLUDE:

- AFTER OVER 30 YEARS OF CABLE MONOPOLY, AREAS IN BOTH RURAL AMERICA AND THE NATION'S INNER CITIES STILL ARE NOT SERVED BY CABLE. FAILURE TO INTRODUCE A MARKET FORCE TO ENSURE THAT THESE AREAS BE GIVEN ACCESS TO CABLE COULD RESULT IN THE NATION BEING DIVIDED INTO A SOCIETY OF INFORMATION "HAVES" AND "HAVE NOTS".

- TECHNOLOGICAL CHANGES, SUCH AS FIBER OPTICS AND DIGITAL SWITCHES, MAKE POSSIBLE AND ECONOMICAL SERVICES THAT HERETOFORE WERE NOT THOUGHT OF, INCLUDING AN INTEGRATED, UBIQUITOUS, SWITCHED BROADBAND NETWORK.

- OUR COMPETITORS IN THE GLOBAL MARKET, INCLUDING THOSE IN ASIA AND THE EUROPEAN COMMUNITY ARE SPENDING BILLIONS IN GOVERNMENT AND PRIVATE FUNDS TO BUILD THEIR OWN FIBER OPTIC TELECOMMUNICATIONS NETWORKS AND TO DEVELOP THE TECHNOLOGY TO SUPPORT THOSE NETWORKS.

WE BELIEVE THE FREEDOM TO FULLY COMPETE IN CABLE, NOT JUST THE DELIVERY OF VIDEO SERVICES, BUT ALSO VIDEO PACKAGING AND PROGRAMMING AS PROVIDED BY S. 2800, IS AN IMPORTANT RESPONSE TO EACH OF THESE CHALLENGES.

PROBLEMS BEING EXPERIENCED IN MANY COMMUNITIES AROUND THIS COUNTY DUE TO CABLE'S EXCESSIVE MARKET POWER HAVE BEEN DOCUMENTED BY REPRESENTATIVES OF LOCAL GOVERNMENT AND CONSUMER ACTIVISTS. I HAVE ATTACHED TO MY TESTIMONY STUDIES COMMISSIONED BY USTA AND FILED WITH THE FCC WHICH EXHIBIT THIS UNDUE MARKET POWER. THE FINDINGS OF THESE STUDIES HAVE BEEN FURTHER SUPPORTED BY THE DEPARTMENT OF JUSTICE.

I DID NOT COME TO WASHINGTON TODAY TO REITERATE THE VOLUMINOUS ARGUMENTS AGAINST CABLE. I COME WITH A POSITIVE MESSAGE TO HIGHLIGHT A VISION, SHARED BY MANY MEMBERS OF THIS COMMITTEE, OF A UNIVERSALLY AVAILABLE BROADBAND FIBER OPTIC PUBLIC SWITCHED NETWORK.

III. PERMITTING TELCO ENTRY IS PRO CONSUMER AND THE TELCO BASHING MYTHS OF OUR DETRACTORS ARE FALSE.

THE OPPONENTS OF CHANGE IN THEIR QUEST TO MAINTAIN THE STATUS QUO, THROUGH WHICH THEY ARE THE BENEFICIARIES OF A FEDERALLY PROTECTED MARKET, FALSELY ARGUE THAT:

* ALL SERVICES EXCEPT FULL MOTION VIDEO CAN BE DELIVERED OVER COPPER (AND CONSEQUENTLY, THAT VIDEO DELIVERY SHOULD BE LEFT TO THE CABLE INDUSTRY);

* THE COST OF FIBER IS TOO EXPENSIVE: AND THERE ARE NO SAFEGUARDS AGAINST CROSS-SUBSIDIZATION.

* THERE CAN BE NO PROTECTION AGAINST CROSS-SUBSIDIZATION IF TELEPHONE COMPANIES ARE PERMITTED TO COMPETE.

EACH OF THESE ARGUMENTS SHOULD BE RECOGNIZED FOR WHAT THEY ARE, PROTECTIONIST PLEADINGS, BUT CERTAINLY NOT THE TRUTH.

NEED FOR FIBER

COPPER AND COAXIAL CABLE IN ITS CURRENT SYSTEM ARCHITECTURE CAN NOT PROVIDE SWITCHED, TWO-WAY, HIGH DEFINITION VIDEO AND THE MYRIAD OF SERVICES A FIBER NETWORK CAN OFFER. THAT SUCH A NETWORK WOULD BENEFIT THIS NATION IS ALREADY BEING DEMONSTRATED BY SMALL TELCOS AROUND THE COUNTRY. FOR INSTANCE, IN OKLAHOMA'S RURAL PANHANDLE, THE LOCAL TELEPHONE COOPERATIVE, IN RESPONSE TO A COMMUNITY NEED, LINKED THE COMMUNITY'S SCHOOLS WITH FIBER. THIS HAS ALLOWED FACULTY COSTS TO BE REDUCED WHILE, AT THE SAME TIME, INCREASING THE TEACHER TO STUDENT RATIO. THE COMMITMENT OF THE PANHANDLE TELEPHONE COOPERATIVE TO IMPROVED AND PROVEN TECHNOLOGY PERMITTED EACH OF THE SCHOOLS TO STAY OPEN AND TO ENRICH THE EDUCATIONAL EXPERIENCE FOR EACH OF THE STUDENTS. MEDICAL AND BUSINESS RELATED TECHNOLOGIES COULD ALSO BENEFIT RURAL AMERICA.

A SWITCHED VIDEO SYSTEM OFFERS THE RESIDENTIAL CONSUMER A WIDE RANGE OF VIEWING OPTIONS AND THE ABILITY TO CONTROL HIS OR HER ACCESS TO TELEVISION. THE GTE EXPERIMENT IN CERRITOS AND THE PROPOSED CONTEL TRIAL SHOULD GIVE US NEW INSIGHTS INTO THE APPLICATION OF THIS TECHNOLOGY. I MIGHT ADD THAT THESE ARE BENEFITS WHICH COME WITH SWITCHED FIBER DEPLOYMENT, NOT FROM DIRECT BROADCAST SATELLITES OR WIRELESS CABLE.

COSTS OF FIBER DEPLOYMENT

OUR DETRACTORS SAY THAT FIBER IS TOO EXPENSIVE. JUST LAST JUNE THEY RELEASED A STUDY STATING THAT IT WOULD COST ALMOST 900 BILLION DOLLARS TO WIRE THIS COUNTRY. TODAY, EVEN THEY AGREE THAT THE NUMBER IS PROBABLY CLOSER TO 300 BILLION. MR. CHAIRMAN, ACCORDING TO THE NUMBERS OF OUR DETRACTORS, THE PRICE OF DEPLOYMENT HAS ALREADY FALLEN BY A THIRD.

I COULD CITE STUDIES WHICH ESTABLISH THE COSTS TO BE LOWER THAN 200 BILLION DOLLARS AND STUDIES WHICH SAY DEPLOYMENT OF FIBER TO BE EQUIVALENT TO THAT OF COPPER IN LESS THAN FIVE YEARS. I COULD POINT OUT THAT THE TELEPHONE INDUSTRY ALREADY SPENDS 20 BILLION DOLLARS A YEAR TO UPGRADE OUR INFRASTRUCTURE. BUT, PLEASE ALLOW ME TO ILLUSTRATE WHY I BELIEVE DEBATING THE COST OF FIBERING THE NATION SERVES NO USEFUL PURPOSE.

IN 1960, WERE WE TO HAVE ESTIMATED WHAT IT WOULD HAVE COST FOR EVERY AMERICAN TO PURCHASE A POCKET CALCULATOR, WE WOULD HAVE HAD TO MULTIPLY THE POPULATION BY A NUMBER IN THE HUNDREDS OF DOLLARS. TODAY, A BETTER QUALITY CALCULATOR COSTS LESS THAN TEN DOLLARS. WE BELIEVE THAT TRYING TO ESTIMATE THE COST OF FIBER TO THE HOME IS MUCH LIKE THAT CALCULATOR.

COSTS FOR THE DEPLOYMENT OF FIBER HAS FALLEN AND WILL CONTINUE TO FALL. BUT UNLIKE THE CALCULATOR, THIS COMMITTEE MAY RELY UPON AN ESTABLISHED SAFEGUARD. THE INDIVIDUAL STATE PUBLIC UTILITY COMMISSIONS WILL NOT ALLOW US TO FULLY DEPLOY FIBER UNTIL IT IS COST JUSTIFIED.

SAFEGUARDS

FINALLY MR. CHAIRMAN, AS TO THE CLAIMS OF OUR DETRACTORS THAT WE WILL CROSS-SUBSIDIZE AND THAT NO LEVEL OF GOVERNMENT CAN PROPERLY POLICE AGAINST CROSS-SUBSIDIES, WE WOULD CITE THE COMMENTS OF FCC CHAIRMAN SIKES AND THE NUMEROUS STATE UTILITY COMMISSIONS THAT HAVE STATED THAT THEY WOULD HAVE NO PROBLEM POLICING AGAINST CROSS-SUBSIDIES. INDEED, THEY ARE DOING IT TODAY BECAUSE TELCOS ARE ALREADY INVOLVED IN UNREGULATED BUSINESSES.

INDEPENDENT TELEPHONE COMPANIES ARE CURRENTLY SUBJECT TO ANNUAL AUDIT BY:

1. THE STATE PUBLIC UTILITY COMMISSION
2. THE NATIONAL EXCHANGE CARRIER ASSOCIATION [NECA]
3. THE STATE EXCHANGE CARRIER ASSOCIATION
4. AT&T AND OTHER LONG DISTANCE CARRIERS

MY COMPANY IS FURTHER SUBJECT TO AN AUDIT EVERY TWO YEARS BY THE REA.

TO NOW CLAIM THAT WE CAN NOT ENTER A NEW FIELD BECAUSE OF THE FEAR OF CROSS-SUBSIDIES IS EITHER NAIVE OR DISINGENUOUS. EVEN DR. LELAND JOHNSON, MY CO-PANELIST, SAID "CROSS-SUBSIDZATION BY TELEPHONE COMPANIES SEEKING TO COMPETE WITH CABLE OPERATORS IS UNLIKELY BECAUSE THE AMOUNTS OF SUBSIDIZATION REQUIRED WOULD BE LARGE AND EASY FOR REGULATORS TO SPOT."

WHILE WE STRONGLY BELIEVE THAT ADDITIONAL SAFEGUARDS ARE NOT NEEDED, IN AN EFFORT TO BETTER SERVE OUR CUSTOMERS AND RESPOND TO THE CONCERNS OF CONGRESS, WE ARE MORE THAN HAPPY TO DISCUSS ADDITIONAL CONSUMER AND COMPETITOR PROTECTIONS, WE ARE MORE THAN WILLING TO ACCEPT THE VERY STRONG SAFEGUARDS REQUIRED OF US BY SENATOR BURNS' LEGISLATION.

WE ONLY ASK THAT THIS COMMITTEE REMEMBER THAT WE ARE COMPETING AGAINST A VERTICALLY INTEGRATED, FIRMLY ENTRENCHED INDUSTRY WHICH IS UNREGULATED, FREE TO CROSS-SUBSIDIZE AND UNLIMITED IN THEIR ABILITY TO VERTICALLY INTEGRATE.

THE TELEPHONE INDUSTRY'S VISION IS OF A DIVERSE AND COMPETITIVE CABLE ENVIRONMENT THAT PROVIDES BENEFITS NOT ONLY TO THE VIEWING PUBLIC BUT STRENGTHENS THIS NATION'S GLOBAL COMPETITIVENESS. THIS IS AN ENVIRONMENT THAT THIS COMMITTEE HAS THE OPPORTUNITY TO HASTEN WITH THE PASSAGE OF S 2800, THE COMMUNICATIONS COMPETITIVENESS AND INFRASTRUCTURE MODERNIZATION ACT OF 1990.

BY PERMITTING TELCO COMPETITION, S 2800 WOULD:

* PUT DOWNWARD PRESSURE ON CABLE RATES BY INTRODUCING COMPETITIVE MARKET FORCES;

* INCREASE VIEWING OPTIONS AS MORE CABLE PROVIDERS ENTER THE MARKET;

* PROVIDE FINANCIAL INCENTIVES TO ACCELERATE THE DEPLOYMENT OF FIBER OPTIC TECHNOLOGY TO THE WHOLE NATION; AND

* SPEED THE DAY WHEN ALL AMERICANS, IN RURAL AND URBAN COMMUNITIES, HAVE AVAILABLE TO THEM THE NEWEST OF COMMUNICATIONS ESSENTIALS, CABLE TELEVISION.

CONCLUSION

IF THE NATION'S TELECOMMUNICATIONS INFRASTRUCTURE IS TO PROGRESS AT AN ADEQUATE PACE, PUBLIC POLICIES MUST BE CHANGED TO NOT ONLY REMOVE THE ARBITRARY BARRIERS TELEPHONE COMPANIES NOW

FACE, BUT POLICY MUST BE CHANGED TO FOSTER CONDITIONS THAT PROMOTE THE DEPLOYMENT OF AN ADVANCED INFRASTRUCTURE AND NEW SERVICES. WE BELIEVE THAT THIS APPROACH IS THE GREATEST STRENGTH OF THE BURNS' TELCO/CABLE APPROACH. S.2800 IS LEGISLATION THAT IS COGNIZANT OF THE BROADER CONTEXT OF INFRASTRUCTURE ISSUES SUCH AS UNIVERSAL DEPLOYMENT, EFFICIENCIES AND TIMELY DEPLOYMENT.

WE ARE EAGER TO COMPETE AND IT IS IN THE NATION'S LONG TERM NATIONAL INTEREST TO PERMIT THE TELECOMMUNICATIONS INDUSTRY TO COMPETE, NOT JUST TO CONTROL RATES AND QUALITY OF SERVICE TO CABLE TELEVISION CUSTOMERS, BUT MORE IMPORTANTLY, FOR OUR NATION'S LONG TERM ECONOMIC WELL BEING. BOTH THE CONGRESS AND U.S. INDUSTRY, HAVE BEEN RIGHTFULLY CRITICIZED FOR FAILING TO PLAN FOR THE LONG HAUL. HERE IS AN OPPORTUNITY FOR CONGRESS TO UNLEASH AMERICAN INDUSTRY TO COMPETE, INDEED PARTICIPATE IN THE TECHNOLOGY OF THE NEXT CENTURY.

BY ENDORSING THE COMPETITIVE RESOLUTION TO CABLE PROPOSED IN S. 2800, THIS COMMITTEE WILL DO MUCH MORE THAN MERELY PERMIT TELCO ENTRY INTO CABLE. YOU WILL ALLOW THIS NATION TO PREPARE FOR THE ECONOMIC AND SOCIAL CHALLENGES OF THE NEXT CENTURY WITH NEW VIGOR AND THE NEWEST OF TOOLS, A MODERN COMPETITIVE INFORMATION INFRASTRUCTURE.

MR. CHAIRMAN, THERE IS NO PUBLIC INTEREST TO BE SERVED BY PRECLUDING MY COMPANY, OR ANY TELEPHONE COMPANY, FROM BECOMING A PARTNER IN THE PROVISION OF NEW SERVICES. I HOPE THAT MY TESTIMONY HAS MADE CLEAR THE PUBLIC POLICY BENEFITS TO BE ACHIEVED BY ALLOWING TELCO ENTRY AND HOPE THAT THIS COMMITTEE WILL ACT FAVORABLY ON S 2800.

THANK YOU.

Senator INOUYE. Thank you very much, Mr. Swanson. Mr. Hostetter.

STATEMENT OF AMOS HOSTETTER, JR., CHAIRMAN AND CHIEF EXECUTIVE OFFICER, CONTINENTAL CABLEVISION, INC.

Mr. HOSTETTER. Mr. Chairman, members of the Committee, thank you for this opportunity to appear before you and testify on S. 2800. I have submitted a fuller statement, which I would ask be submitted into the record.

Senator INOUYE. All the witnesses written statements will be made part of the record.

Mr. HOSTETTER. Mr. Chairman, my company, Continental Cablevision, has been in the business of delivering video to American homes since 1963. Over 27 years we have grown to be the fourth largest company in the cable industry, serving more than 2.6 million subscribers. Nevertheless, we pale in size compared to any of the Bell Operating Companies, or the major independent telephone companies.

During the almost three decades in which I have been involved in the cable industry, I have seen a continuous effort by the telephone companies to take over the business of video programming from broadcasting and cable television operators. Now the phone company is back again with a new rationale, fiber optics.

We are told that America needs fiber optics to the home, that this is the super highway of the future, and that it will provide unparalleled benefits for rural America, for education, and for American competitiveness. We are also told that this bill is a middle ground, a compromise approach, with many safeguards to protect consumers and competitors.

I am here today, Mr. Chairman, to respectfully tell you that in my view none of these things are true.

First, this bill is in fact not a modest proposal, but a far-reaching effort to achieve full telephone company entry into the television business. It is an attempt by the telephone industry to become the single dominant providers of voice, video, and data, the so-called one-wire solution, an agenda that the telcos have pursued for over two decades.

In a fiber optic world, as the telcos themselves will tell you, the number of channels that can be carried on a video pipeline is practically limitless. So telling us that telcos will control only 25 percent of this capacity, as S. 2800 would do, is an illusory safeguard.

This bill is also not about helping small, independent telephone companies. What we have here is multi-billion- dollar telco giants mounting a multi-million-dollar lobbying and public relations effort, and using small independents, like Mr. Swanson's company, to run interference for them. It is no secret who pays the vast bulk of USTA's lobbying costs.

One immediate beneficiary of the bill would be GTE, whose $17 billion revenues last year were greater than those of the entire cable industry. And GTE has just announced its intention to merge with Contel, the third largest independent.

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With the Bell Operating Companies and GTE/Contel, together controlling 90 percent of the U.S. telephone business, it is clear who would really benefit from this bill.

This bill is also not about allowing telephone companies to provide video transport for others, whether for programming for the home or for video conferencing. The telcos can and do provide such services for third parties under existing law.

This bill is about telco TV supported by telephone ratepayers. What the telcos really want is to abandon their common carrier status and become television programmers and packagers, competing directly with broadcasters, cable operators, MMDS, DBS and local video stores.

So, you might say, what is wrong with a little more competition? Frankly, there is just one critical catch to the telco scheme. At the same time that telcos want to compete in the video marketplace, they would like to keep their monopoly hold and guaranteed rate of return on plain old telephone service carrying voice data and use that base to subsidize competitive activities. In other words, they want telephone ratepayers to subsidize their entry into telco TV.

This bill does not contain adequate safeguards. No one has yet designed an adequate set of safeguards to protect against the telco's incentive and ability to engage in anticompetitive behavior. The dangers would be particularly acute under this bill before you where there are a number of allowable transactions between the parents and the subsidiaries that the FCC has called upon to scrutinize. The FCC is notably without resources to police the telcos at this level.

The record is well documented. Your own General Accounting Office has indicated that the FCC has the facilities to audit each major telephone company once every 16 years. The results of Judge Greene's inquiry; the recent U.S. Court of Appeals decision in the Computer III inquiry; FCC Commissioners Andrew Barrett and Ervin Duggan are all clear on the subject that the FCC is not properly staffed to provide the sort of safeguards, the sort of review that this bill would suggest.

Moreover, the separate subsidiary requirement in S. 2800 does not apply to constructing or maintaining facilities, acquiring programming, arranging financing or billing and collection.

Through the recent scandals involving Nynex and others, we have again seen that telephone companies have an inexorable incentive towards cross-subsidy. The telcos are really asking for telephone ratepayers to support them in a scheme to create unnecessary capacity in the delivery of telephone services to American households.

A study co-sponsored by the Consumer Federation of America and the American Association of Retired Persons earlier this year projected that goldplating the telephone network to provide video broad-band capacity to every home would cause an unnecessary charge of $5 per month per residential telephone every month for the next 33 years. Because of their guaranteed rate of return, the easiest way for phone companies to make money is simply to invest more money. A $400 billion telco investment in fiber to the home is the seed for the next savings and loan crisis with American consumers again footing an enormous bill.

S. 2800 is also not needed to promote utilization of fiber optics. Cable telephone companies are already installing fiber optics on a national basis. The local exchange carriers are using it where it makes economic sense. The long distance carriers are installing it in increasing amounts, and many bypass carriers are already growing up using the same. Fiber will be developed in the U.S. without the drastic reversal of well-established communications policies as you, Mr. Chairman, so ably pointed out.

Thank you.

[The statement and questions and answers follow:]

TESTIMONY OF AMOS B. HOSTETTER, JR.
CHAIRMAN AND CHIEF EXECUTIVE OFFICER
CONTINENTAL CABLEVISION, INC.
BEFORE THE SENATE COMMERCE COMMITTEE
ON S.2800
"THE COMMUNICATIONS COMPETITIVENESS AND INFRASTRUCTURE MODERNIZATION ACT OF 1990"

July 24, 1990

Mr. Chairman and members of the Committee: Thank you for this opportunity to testify today representing my company, Continental Cablevision, Inc., and presenting the views of the National Cable Television Association, on whose Board and Executive Committee I serve.

My company has been in the business of delivering video to American homes since 1963. In the intervening 27 years, we have grown to become the fourth largest company in the cable industry, serving approximately 2.6 million subscribers in 600 communities across the United States. Nevertheless, our company pales in size when compared with any of the Bell Operating Companies and the major independent telephone companies. For example, Continental's 1989 revenues were roughly one-twentieth those of U.S. West, the fourth largest BOC.

During the almost three decades that I have been involved in the cable television business, I have seen a continual effort by the telephone companies to take over the

business of video programming from broadcasters and cable television operators. Now the telephone companies are back again with a new argument --- fiber optics. We are told that America needs fiber to the home --- that this is the "superhighway of the future," and that it will provide unparalleled benefits for rural America, for education, and for America's international competitiveness. We are also told that this bill is a "middle ground" or "compromise approach" with many "safeguards" to protect consumers and competitors.

I am here today to tell you that this bill is none of these things.

First, this bill is in fact not a "modest proposal", but a far reaching effort to achieve full telephone company entry into the field of video programming. It is a bold attempt to achieve the telcos' dream of becoming the single dominant provider of voice, video, and data --- a vision that the telephone companies have been pursuing for over two decades.

When the Justice Department was preparing its antitrust case against AT&T, it discovered a document recording a meeting in the 1960s in which a Bell Company executive was already envisioning that one day there would be a single conduit into the home containing voice, video and data. He stated "we must

own that pipe --- not just own it more importantly --- control it." Well, the telephone companies have never given up that goal, and this bill is its culmination.

In a fiber optic world, as the telcos themselves will tell you, the number of channels that can be carried on the video pipeline is practically limitless. So letting telcos control "only" 25 percent of this capacity, as this bill would, is meaningless. The bill's proponents' own charts show, for example, that in a 200 channel system, the telephone company gets to control 50 channels. This is not giving telcos a few channels to "jump start" their entry into television. If a telco gets its 50 channel portion up and running before competing video providers who want to use their network, it will have de facto control of that TV market.

This bill is also not about helping small independent telephone companies.

Again, the bill's proponents will tell you that since the Bell Operating Companies are still subject to the MFJ restriction against getting into "information services," this bill will not let them into cable. The bill, they say, will only allow cable entry by smaller, independent telcos. What we have here is multi-billion-dollar telco giants using smaller independents to run interference for them.

One immediate beneficiary of the bill would be GTE, whose revenues last year were $17.4 billion, greater than the revenues of the entire cable industry. And GTE two weeks ago announced its intention to merge with the third largest independent, Contel, whose 1989 revenues of $3.1 billion were larger than those of any cable operator, including TCI. In fact, GTE and Contel together will form the largest U.S. telephone company in terms of revenues, larger than any of the Bell Operating Companies.

Moreover, as you are aware, the Bell Operating Companies are backing this bill, directly and through the telco trade associations. And why not? They hope that the MFJ information services provision will be invalidated on remand from the D.C. Circuit to Judge Greene, and then they will be able to immediately move into cable using this bill, without ever coming back to Congress. Since the Bell Operating Companies and GTE/Contel together control 90% of the telephone business, it is clear who is really going to benefit from this bill.

<u>This bill is also not about video transport by telephone companies</u>.

Contrary to what some in the telephone industry would have you believe, telephone companies, including the Bell Operating Companies, may build and own video distribution facilities both in rural and non-rural areas today, under

existing law. The cross-ownership prohibition codified by Congress in 1984 affects only a telephone company's ability to itself engage in programming over those video distribution services.

This law does not impede their ability to put in fiber for transport. In fact the telcos are right now putting in thousands of miles of fiber trunk backbone throughout the United States to modernize delivery of voice and data, and nothing in current law prevents them from continuing to do so.

And, if telephone companies really possess superior technology than cable operators, and truly believe they have something to offer that is unique in the delivery of video, they have no legal barrier to fully engage in the video transport business. In fact, telephone companies have provided leased broadband coaxial network services to cable operators in cities such as Washington, D.C., Cleveland, and Palo Alto. And they can today offer facilities for video conferencing and any other interactive services, so long they do so on a common carrier basis, under tariff.

What this bill is about is telco TV, supported by American telephone ratepayers.

The telephone companies now admit they do not want to build a fiber highway to the home solely for others to use. What they really want to do is to abandon their traditional

common carrier role and become television programmers, competing directly with broadcasters, cable operators, MMDS and DBS operators and local video stores.

So what is wrong with competition, you might ask? There is one critical catch to how the telcos would compete. At the same time telcos want to compete in the video marketplace, they would like to keep their monopoly hold and guaranteed rate of return on plain old telephone service, carrying voice and data, and use that monopoly base to subsidize competitive exploits. In other words, they want telephone ratepayers to subsidize their entry into telco TV.

The notion of telephone company entry into the video marketplace may have superficial appeal, until you begin to consider the reasons that restrictions were placed on telephone company activities in the first place. During the 1960's and 70's, AT&T, the parent of today's Bell Operating Companies, and GTE both tried to impose costly leaseback arrangements on cable operators, attempting to use their monopoly power to impede the development of other communications media. Failing to force channel leasebacks on cable operators, the telephone industry eventually attempted through unreasonable and burdensome pole attachment fees and conditions to restrain cable's development. I will submit for the record under separate cover two of these cases involving GTE, Manatee Cablevision and

TeleCable Corporation. This pattern of telco abuses against cable finally resulted in enactment of the 1978 Federal Pole Attachment Act.

Despite this Act, the telephone industry still possessed tremendous potential for anticompetitive activity through cross subsidy of competitive business activities. That is why, as part of the 1984 Cable Communications Policy Act, Congress codified the FCC's telco-cable cross-ownership provisions, which had been adopted in 1970.

This bill does not contain adequate "safeguards".

Nothing has changed since 1984 to lessen the potential for anticompetitive abuse, and no one has as yet designed a set of adequate safeguards against cross subsidy. Indeed, the potential for cross-subsidization is one of the chief reasons Judge Harold Greene has continued to limit the activities of the Bell Operating Companies. As Judge Greene has pointed out on many occasions, there could easily be misallocations of common costs where any telephone company uses the same facilities and equipment to serve both its regulated monopoly activities with a guaranteed rate of return and its competitive activities, even where those activities are undertaken by separate subsidiaries of the parent company.

The potential for cross subsidization is even greater with integrated broadband networks carrying voice, video and data. This danger would be particularly acute under the bill before you, where there are number of allowable transactions between the parent and the subsidiary that the FCC is called upon to scrutinize for cross-subsidy. The FCC is notably without resources to police the telcos at this level.

The General Accounting Office has stated that the FCC at present only has enough auditors to review each major telephone company once every 16 years. As FCC Commissioner Duggan recently noted, in order to police telco video operations the FCC would need --- and taxpayers would have to fund --- "a 60 story building in Gaithersburg filled with FCC accountants." And the U.S. Court of Appeals in its Computer III/Open Network Architecture decision recently found arbitrary and capricious FCC reliance on the kind of accounting safeguards the bill would rely on.

Moreover, the separate subsidiary requirement in S. 2800 applies only to marketing and selling cable services. It does not apply to constructing or maintaining facilities, acquiring programming, arranging financing, or billing and collection. The telcos could misallocate R&D, legal, accounting and other administrative costs to their regulated monopoly business supported by telephone ratepayers, and use them to benefit

their competitive video business. Even at that, the FCC is given broad discretion to waive what little protection is provided.

We have learned again the lesson through the recent scandals involving NYNEX and its MECO procurement subsidiary that telephone companies have an inexorable incentive towards cross-subsidy. Even there the offense was discovered by the FCC only after an article in the Boston Globe. And the fine imposed by the FCC was only $1.4 million, a fraction of NYNEX's annual revenues, and pales in comparison with the millions NYNEX allegedly received in misallocated costs and overcharges.

Two weeks ago consumer advocates representing the five states served by Ameritech (Illinois, Indiana, Michigan, Ohio, and Wisconsin) joined together in charging that Ameritech has improperly billed its ratepayers for millions of dollars of company expenses, including:

- Washington lobbying expenses;
- improper advertising expenses; and
- bill inserts advocating the removal of Bell's line-of-business restrictions.

The consumer representatives called for an in-depth, company-wide investigation of Ameritech to determine what costs the company has improperly allocated to telephone ratepayers.

The charges were sparked by a recent audit conducted by the Wisconsin Public Service Commission, which recommended that 30 percent of Ameritech's reported expenses be disallowed from telephone rates.

Despite these and other recent discoveries, cross-subsidization and anticompetitive behavior are very difficult to detect. A number of independent authorities, including the U.S. Court of Appeals and the U.S. General Accounting Office, have stated that safeguards to protect against this kind of behavior are not likely to be effective. Even in those rare circumstances when regulators are capable of detecting cross-subsidies, the damage to competitors or would-be competitors harmed by the process has already occurred.

Looking around this room today I daresay that telephone ratepayers are footing a large part of the bill for the telcos' lobbying campaign to get into the television business.

A study co-sponsored by the Consumer Federation of America and the American Association of Retired Persons earlier this year estimated that goldplating the national telephone company network to provide video broadband capacity to every home would cause a unnecessary charge of $5 per month per subscriber for 33 years. At recent state PSC hearings on accelerated depreciation of copper plant to replace it with fiber optics a Bell South strategy paper was introduced in

evidence that said they expected ratepayers to foot the bill to let them win the race to become "the first company to the home with fiber."

What the telcos are really asking for is that the American public support them in a scheme to create unnecessary capacity before services are developed that consumers and businesses want and need and will pay for. By virtue of their guaranteed rate of return, the easiest way for phone companies to make money, quite simply, is to spend money. A $400 billion telco investment in fiber to the home holds the seeds for the next S&L crisis, with consumers again picking up the tab.

This bill is also not needed to promote the expansion of fiber optic video delivery.

Cable television companies are already putting in fiber optics on a nationwide basis. My own company is investing millions of dollars in deploying fiber optic technology. We have used fiber in a variety of circumstances -- to transport signals over long distances, to upgrade the channel capacity of existing systems and to improve picture quality by reducing noise and distortion.

Typical of the fiber projects Continental has undertaken is an $18 million rebuild of our 45,000 subscriber system in Westfield, Massachusetts. The project included the complete

rebuild of 625 miles of coaxial plant and the installation of more than 325 miles of fiber optic cable that connect our main headend with distribution hubs in five Western Massachusetts communities. The rebuild doubled the channel capacity from 30 to 60 and enabled the introduction of 20 new basic services, three premium services and pay-per-view programming.

In Eastern Massachusetts we embarked on a $7 million rebuild project in July, 1987 that now benefits some 50,000 subscribers. Broadband video signals are transported via optical fibers to five cities and towns from a master distribution facility. Currently there are more than 630 miles of optical fiber in the network.

An even more ambitious fiber construction project is underway in our Jacksonville, Florida system where 700 miles of optical fiber are being integrated with our coaxial plant to improve system reliability (through redundancy) and to facilitate delivery of technically superior pictures to 100,000 cable subscribers. We are also beginning a $27 million rebuild of our Stockton, California system that will combine fiber optics and coaxial technologies in a unique system that will use fiber optics in the system's backbone and extend the fiber down the line to 40 or more nodes that could help localize outages.

This performance is typical of the cable industry as a whole. Every one of the 20 largest cable MSOs has begun installation of fiber. Cable industry deployment of fiber is expected to grow at an annual rate of 25 percent over the next decade. These are "fiber backbone" and "fiber to the neighborhood" designs, since even the RBOCs admit that the concept of "fiber to the home" for video delivery is today prohibitively expensive. But if and when fiber to the home makes economic and technological sense, cable systems will be positioned to go this extra step.

Despite all the telephone industry rhetoric about fiber, it is telling that S.2800 does not even require a telephone company to install fiber in order to claim the benefits of its provisions. The bill allows telephone companies to build pure coaxial cable or partial coaxial, partially fiber systems like cable companies are now doing, and provide programming over them. In fact, where telephone companies have obtained cable franchises abroad, in the United Kingdom and in Hong Kong, they are building separate coaxial cable systems for video and parallel narrowband networks for voice and data, not the integrated broadband fiber optic "superhighways to the home" they trumpet here in the halls of Congress.

This bill is not about delivery of educational services.

The delivery of educational services through video to rural America, as well as major urban areas, is being

accomplished today through a wide variety of technologies that do not require the construction of a costly fiber network. As the NCTA report entitled "Telephone Company Blue Sky Promises To Rural America", attached to my testimony, illustrates, innovative video services can be and are being delivered in rural areas without incurring the risks imposed by telephone entry into television programming.

To give you some examples of what is being accomplished by the cable industry, Continental sponsors two programs --- "Cable In The Classroom," and "Distance Learning" --- using our own facilities. "Cable In The Classroom" provides specifically designed noncommercial programs free of charge to over 800 schools within our franchise areas. For example, although our Granby Connecticut system serves only 3,000 subscribers, the librarian for the small rural high school works with seventeen teachers who regularly use cable's commercial-free programming in the classroom. Because of cable's unique architecture, we have been able to interconnect four school districts with full motion two-way video to facilitate classes in stenography, advanced languages and jazz improvisation that could not be offered on a stand-alone basis.

"Distance Learning" allows interactive courses such as Latin to be provided to high school students that could otherwise not be offered because of small student enrollments.

When Pleasantville, New York high school senior Ben Heller scored a perfect 800 on his SAT verbal portion, he credited the school's Distance Learning program which allows students to see and talk with their teacher ten miles away via cable television.

The cable industry in general has promoted technological improvements that continue to expand the boundaries of television programming to encompass new services that take advantage of developments that have enabled customers to communicate in an interactive, or two-way, setting. Many other cable systems besides Continental provide sophisticated communications capabilities to schools, local governments, and non-profit institutions. These services are generally known as Institutional Networks, or I-Nets.

This bill is also not about providing new services to rural areas.

Telephone companies are now permitted by law to provide cable service to rural areas. To date rural telephone companies have been granted permission to provide cable television in almost 400 communities in their service territories. We have not heard about innovative interactive services provided in these communities.

Nor is this about extending the reach of cable service to additional rural communities. The bill proposes to raise

the rural exemption to the cross-ownership ban from 2,500 to 20,000. A five-state sample study by NCTA indicates that all or virtually all communities of that size are currently served by cable operators.

This bill's vision of a single fiber network to the home is not the only viable future scenario for U.S. communications systems.

There is still substantial debate as to what is the optimal system design for the voice, data and video service delivery of the future. The telephone companies argue that an integrated switched broadband network will provide significant economies of scope or scale. Every independent entity that has examined the issue, including the RAND Corporation study you will be hearing about today, has found a "one wire" solution neither economically nor technologically sound.

The uncertainty of the telco premise is discussed at length in a report "The Integrated Broadband Network Of The Future: Separating Fact From Wishful Thinking" that was prepared for Continental by Hatfield Associates Inc. and submitted to NTIA in April 1990 as part of its comprehensive study of the communications infrastructure. I have enclosed a copy of the Hatfield Report for submission with the record of this hearing.

As Mr. Hatfield, the former Deputy Director of NTIA, states: "There is no real issue as to whether the LECs should be able to construct broadband fiber facilities directly to the premises of those large and specialized customers who have a need for broadband digital 'pipes.' Indeed the LECs have already been deploying such facilities to meet the needs of such customers....[T]he real issue is whether ordinary ratepayers should shoulder the technical, economic and marketplace risk of a ubiquitous integrated broadband network."

According to Mr. Hatfield, those who favor integrating telephone and cable services on one wire, "often ignore the wide differences in the requirements for voice, data, and video services and the penalities that are associated with trying to serve them on a 'one size fits all' basis."

This bill is not about international competitiveness.

As I have noted, where the telephone companies have moved overseas to provide cable service they are providing such services using traditional cable company architecture, not on integrated broadband fiber optic networks. Thus their arguments that other countries will pass by us in this area ring quite hollow.

Contrary to the charges of the telcos, the United States is still the world leader in telecommunications. This point is proven in a study conducted by the International Communications Association and the Consumer Federation of America that concluded that "[v]irtually every viable indicator of the performance and usage of public telecommunications networks shows that the U.S. remains far ahead of its strategic competitor nations: France, Germany, the United Kingdom, Japan and Singapore." The study found that the U.S. telecommunications industry is investing from 30% to 80% more on a per phone line basis than countries like Japan and France, insuring that the U.S. will remain in the forefront of telecommunications services.

Telcos often claim that Japan is building an all-fiber infrastructure, but a Japanese official recently admitted that Nippon Telegraph and Telephone, Japan's national telecommunications monopoly, has not received approval to begin building their highly touted broadband network, and that Japan could not even begin to construct such a network until 1995 even if approval were granted.

The United States is also the world leader in cable television service and technology, with the U.S. having 70% of the world's cable television systems. This infrastructure gives the U.S. an edge in newly emerging technologies such as

HDTV and fiber optics. Many countries, such as the United Kingdom, have only recently granted franchises to construct cable systems. In Japan, cable television has a penetration of only 14%.

It is no accident that many U.S. cable companies are also partners in the construction and operation of cable systems serving several countries in Asia and Europe, including the newly emerging markets in Eastern Europe.

While cable companies continue to build American competitiveness, telcos are moving in the opposite direction. In testimony regarding a Senate bill proposing to allow RBOCs to manufacture telecommunications equipment, an executive for U.S. West opposed a provision that would have required that manufacturing be done in the United State. Telco opposition to domestic manufacturing demonstrates that removing prohibitions against telco TV will not encourage telephone companies to invest in U.S. competitiveness.

In closing, let me list other serious flaws in S.2800. These illustrate that S.2800 would put consumers at risk by deregulating cable service provided by telephone companies and mandating only illusory "safeguards."

1. Mandatory Deregulation of Telco's Basic Cable Rates. This bill bars regulation of basic cable service provided by a telephone company in a "rural area" unless basic cable rates increase by more than five percent above the consumer price index or ten percent of the cable subscribers submit a formal complaint to the agency with jurisdiction over rates. "Rural area" is broadly defined to include everything outside of an "urbanized area." Even areas with several towns of up to 20,000 inhabitants each would be considered "rural." If the telcos really want competition to cable in order to hold down rates, why do they exempt themselves from local rate scrutiny?

2. Exemption From All Cable Act Requirements. Telephone companies without ownership interests in programming are totally exempt from the franchising, franchise fee and all other requirements of the 1984 Cable Act -- even if they deliver video programming to subscribers like cable operators do. By contrast, a cable operator without ownership interests in the programming services it carries is still subject to the full range of the requirements imposed by the Cable Act.

3. Exemption From Franchising Requirements For Lessee of Capacity. In addition, someone who leases capacity from a telephone company and offers a package of programming services to subscribers -- just as a cable operator does using a cable

system -- would not be subject to the Cable Act's franchising requirement. Yet all cable operators would still be subject to that requirement, including those that will have to compete directly with telcos.

4. Hollow "Separate Subsidiary." As noted above, a separate subsidiary would be required only for marketing and sales -- not for the major capital items like facilities construction and operation. Apparently even the most important marketing functions --- such as institutional advertising, billing and collection, and the advertising of "video services generally" --- could be provided on an unseparated basis. And no separate subsidiary at all is required for the redefined "rural" telco cable systems in communities of up to 20,000.

5. All "Safeguards" Are Waivable. The FCC can waive any of the consumer "protections" if it determines that the public interest would be served.

6. State Regulatory Authority Subject To Federal Pre-emption and Waiver. The development of cost allocation formulas are delegated to a Federal-State Joint Board -- whose recommendations are subject to veto by the FCC. In any event, as noted above, the FCC retains the power to waive whatever cost allocation rules are finally adopted.

7. No Teeth To Divestiture Remedy. A telephone company is required to divest its cable marketing subsidiary only if the telephone company is found to have engaged in willful and knowing cross-subsidization of its cable operations. Consumers are harmed by cross-subsidy, regardless of the intent. Proving that cross-subsidy is "willful and knowing" will be next-to-impossible -- and, in the meantime, billions of dollars of costs could be misallocated to telephone ratepayers.

8. No Right Of Access To Poles and Ducts. A telephone company can demonstrate the availability of pole attachment rights simply by showing that a cable operator is already using telephone company poles. Contrary to assertions of supporters of the bill, that is not the same as affirmatively granting a right of access.

What all these points suggest is that it is an exercise in futility to attempt to define adequate safeguards to contain the telcos.

Mr. Chairman, thank you very much for this opportunity to testify. I would be pleased to answer any questions you may have.

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AMOS B. HOSTETTER, JR.
CHAIRMAN AND
CHIEF EXECUTIVE OFFICER

July 31, 1990

Chairman Daniel K. Inouye
Subcommittee on Communications
Committee on Commerce, Science
and Transportation
SH-227
Hart Senate Office Building
Washington, D. C. 20510

Dear Chairman Inouye:

In my July 24, 1990 testimony before your subcommittee on S.2800, "The Communications Competitiveness and Infrastructure Modernization Act of 1990," I stated that I would submit for the record under separate cover two of the cases from the 1960s and early 1970s in which GTE attempted to use its monopoly power over telephone poles and conduits to impede the development of an independent cable television industry. In the two cases I am submitting, GTE favored its own subsidiary that was applying for a cable television franchise against an independent operator. These cases are TeleCable Corporation, 19 FCC 2d 574 (1969), involving franchise competition in Bloomington and Normal, Illinois, and Manatee Cablevision, 22 FCC 2d 841 (1970), involving franchise competition in Manatee County, Florida.

These cases clearly demonstrate why the FCC in 1970 adopted rules banning telephone companies from holding any interest in cable television companies in their service areas, and the type of telephone company anticompetitive behavior that would reoccur if S.2800 were to become law.

Thanks you again for the opportunity to testify before your Subcommittee.

Sincerely

Amos B. Hostetter, Jr.

Response of Amos B. Hostetter, Jr.
Chairman and CEO, Continental Cablevision, Inc.
to questions from Senator John Kerry.
August 17, 1990

Senator Kerry: "Are there cable operators and/or programmers currently providing interactive educational programming via cable?"

Mr. Hostetter: "Yes, many cooperative ventures have been established between cable operators, educational institutions and governmental organizations to provide interactive educational programming as well as other kinds of instructional television using cable-system-furnished transmission facilities and programming.

In Massachusetts for example, the University of Lowell coordinates an interactive educational network that uses cable television and microwave facilities to link eight school districts. Another system operated by the South Berkshire Educational Collaborative uses an interactive cable TV system to link four schools.

Continental Cablevision built an institutional network (I-Net) to serve communities around Enfield, Conn., so that schools there could offer advanced courses in foreign languages and mathematics. Continental's I-Net ties four area schools together to allow one teacher to instruct students in all of the school districts.

In Tennessee, the TVA is developing an interactive educational system that uses cable television, microwave and satellite communication to link 16 school districts in upper East Tennessee.

These are just a few examples. Last year the Office of Technology Assessment reported on interactive educational programming via cable, and it was an extensive list.

Interactive programming is not new to the cable industry. As you may recall, the cable industry pioneered interactive programming with the QUBE system that was installed in Columbus, Ohio in 1977. Today, Continental Cablevision is testing a new state-of-the-art interactive television system, called ACTV, at our Springfield, Mass., system. We are testing interactive educational software using this new ACTV technology, and it looks very promising."

Senator Kerry: "Approximately how many people currently have access to interactive educational programming via cable, and at what levels -- secondary school, college, graduate level? Is it possible, for example, actually to earn an accredited college or graduate degree by enrolling cable telecourses?

Mr. Hostetter: "Since the late 1970's, the competitive nature of the franchise process has served to provide some kind of interactive educational video service in most communities served by cable.

In Massachusetts the facilities exist for approximately 80 percent of our customers to have access to an interactive educational network. Not all school systems have taken advantage of these facilities, but the infrastructure is in place.

Where the facilities are being used, the results are impressive. In rural New Hampshire Continental Cablevision developed a distance learning project interconnecting six schools in the Timberlane Regional School system using the facilities of Continental and Harron Cable. The system became operational this year and serves 222 teachers and 2,800 students.

In Pennsylvania a joint effort of the cable industry, the Pennsylvania Department of Education and Penn State University called PENNERAMA provides statewide educational programming. This programming is available to more than 740,000 households across the state. About half have two-way interactive capability.

The school systems in Pleasantville and Ossining, New York, are linked by a cable network provided by Continental. Recently, one of their students received the perfect score of 800 on the verbal portion of the SAT. Using the system, the student was able to take four years of Latin, a subject not taught at the school he physically attended. As a result, the student credits Continental's educational network with helping him to achieve such a high score. This year, in addition to Latin, the schools will be teaching Advanced Placement courses as well as courses for college credit. The complete system cost Continental about $1 million to build and operate but is provided to the school systems at no charge.

The programming available on these systems ranges from pre-kindergarten through graduate level, although secondary schools and high schools are the primary audience."

"To provide communication facilities and programming for secondary and high schools, Continental helped found Cable in the Classroom, a joint venture between cable operators and cable network programmers. The cable networks develop and produce the programs and make them available at no cost, and the cable operators wire the schools and provide basic cable service also at no cost. The programs include "Newsroom" from CNN and specially developed educational programming from the Learning Channel, Discovery, C-SPAN, A&E and many others. CNN "Newsroom" is used regularly by more than 10,000 high school teachers. C-SPAN is used by more than 4,000 teachers.

It is possible to earn a degree via cable TV. Perhaps the best-known example is the Mind Extension University (ME/U). The ME/U offers accredited undergraduate courses in business, science, mathematics, education, political science, languages, history and in many other areas. These courses are accepted for credit at universities in 14 states. Through ME/U it is also possible to receive an MBA."

Senator Kerry: "With the technology already available to offer interactive educational programming via cable, what impact, if any would allowing the telephone company entry into the cable industry have on distance learning?"

Mr. Hostetter: "The technology is already available. In a majority of cases, the bandwidth is available or can be readily made available. The programming is also available. As a consequence, telephone company entry would provide not one additional interactive educational service that is not already being provided by the cable industry or could be provided using existing cable technology.

Clearly, the technological, bandwidth or programming problems that telco entry purports to solve do not exist. In addition, there are no legal barriers to prevent rural areas from receiving these services from telephone companies should they desire to provide them. Current law permits telephone companies in rural areas to provide cable service and almost 400 rural telcos provide cable television in their service areas."

Senator INOUYE. Thank you very much.

There is a vote pending at this moment. I will have to return. We will call a recess for ten minutes.

[Brief recess]

Senator INOUYE. Thank you for waiting.

Now may I call upon the President of LIN Broadcasting, Mr. Chapman.

STATEMENT OF GARY R. CHAPMAN, PRESIDENT, LIN BROADCASTING, NEW YORK, NY

Mr. CHAPMAN. Thank you, Mr. Chairman, for the opportunity to represent America's radio and television stations at this hearing. I am here as one of those broadcasters whose free over-the-air stations provide local audience with news, public affairs and entertainment programs. I am proud of the part we play in serving the public interest in every community where we are licensed. S. 2800 will give telephone companies which have none of those obligations an absolute monopoly which will ultimately replace the industry I represent.

Mr. Chairman, the proponents of telco entry using fiber optic technology have discussed it in terms of the competitive promise which this new delivery system could bring to the video and enhanced audio marketplace. In looking at the evidence, however, I feel that that promise is empty. What the telcos really want is what cable already has, an entrenched monopoly with built-in incentives to block competition and to exercise its market dominance over the American consumer.

In your deliberation on S. 2800, I want you to consider several key points. First, when you add the sheer size of the telephone industry to the ability to control the content of their services, you have the makings of even worse abuses than we now experience with cable. The incentives to discriminate against programming providers of other video services, including broadcasters, only increases when control of content is permitted. There are no—and I repeat no—safeguards which will significantly protect broadcasters and the public against telco abuse.

The record of telcos in this area is abysmal. Our written testimony details just a few of the telcos' indiscretions. Why should anyone believe that the bill's alleged self-safeguards will be any more effective than the current rules under which the telcos now operate? For every proposed safeguard, the legislation provides a series of loopholes, waivers and exemptions. Now, incredibly, this administration proposes to even further weaken those so-called safeguards.

Further, no matter what safeguards are drafted, the FCC will not be able to exert the oversight needed to prevent the kind of telco cross-subsidies and other financial abuses of recent years. Chairman Sikes admits the FCC is already understaffed, so how in the world can that agency police huge telephone interests in cable television and other services?

Finally, telco entry will have a real negative impact on local service. The telephone industry dwarfs our industry. How can local

television stations or even networks compete with a giant telco for the rights of sports and entertainment programming?

If you think sports siphoning is a problem now, wait until a major telco buys up the rights to the Super Bowl, the World Series or maybe PAC 10 football and starts charging the audience by the minute to watch. What is to keep that same telco from stealing our best local news anchor and driving our broadcast news off the air? How would that affect the millions who depend on free over-the-air broadcasting?

Our position on telco entry is straightforward. Telcos should be allowed in only as overbuilders where they provide true competition to cable and not as cable systems purchasers. Telcos should remain common carriers. It is their traditional role they have played for generations and one which has served both them and the American people well. Telcos must not be allowed to control the content of any of the services they deliver.

The fully switched broad-band network of tomorrow will have unlimited capacity. The control of even one of the simultaneously available channels will allow the telcos the opportunity to fix the system to their advantage and to their competitors' disadvantage.

When this committee approved S. 1880, it realized cable needed to be brought back into balance with broadcasters and other competitors. That legislation was well crafted and can go a long way toward solving many of the problems with the cable industry. To allow telco entry under the guise of promoting competition will merely undo the good which has been done by S. 1880, and we will be back in a few years trying to fix the problems this bill will cause.

I urge the committee to reject S. 2800 and to instead push forward with the cable legislation you have already approved. Broadband switched fiber networks may hold many promises for tomorrow; however, we should not be so blinded by the promise of this new technology that we ignore the clear threat to competition that telco control of content brings.

[The statement follows:]

STATEMENT OF GARY CHAPMAN, PRESIDENT, LIN BROADCASTING, NEW YORK, NY

Thank you, Mr. Chairman, for the opportunity to appear before your subcommittee today to discuss this most important topic. I am Gary R. Chapman, President of LIN Broadcasting, New York, New York, and Chairman of the Television Board of Directors of the National Association of Broadcasters (NAB). We represent the nation's radio and television stations, including all the major networks.

Let me begin by commending this subcommittee for its leadership on the issue of cable television re-regulation. We believe that S. 1880, the bill which this committee approved last month, will make major strides forward in the effort to bring better balance to the video marketplace. We congratulate you for your foresight and your understanding of the complexity of the issues in moving forward vith this important legislation.

Ironically, the legislation which we are discussing today, S. 2800, if passed, could undo all the progress which we see coming as the result of S. 1880. Indeed, approving S. 2800 would in many ways repeal the improvements which S. 1880 would bring to the American consumer and to broadcasters.

In my testimony today, I want to do three things. First, I want to discuss briefly the overall issue of telephone company (telco) entry into the video marketplace. Second, I want to explain why such entry, without the proper safeguards, will neither increase competition nor prevent consumer abuses. And third, I want to discuss NAB's particular concerns as they relate to the bill authored by Senator Burns, S. 2800, which you are considering here today.

Telco Entry -- An Overview

America's telephone companies are among the largest and most profitable corporations in the nation. And in comparison with either the broadcasting or cable industries, telcos clearly dwarf both of these existing video providers.

For example, in 1989 broadcasting industry revenues for both radio and television totalled $34.1 billion, about $26 billion for TV and $8 billion for radio. Cable industry revenues from all sources were $15.5 billion for that year. But telephone industry operating revenues for regulated services alone were a whopping $89 billion (according to the United States Telephone Association). For just the seven Regional Bell Operating Companies (RBOCs), their revenues were $66.2 billion. Thus, those seven companies together earned more than double the revenue of over 10,000 radio, 1,000 commercial television stations and the TV networks combined.

Industry analysts report that RBOC earnings have increased about 5 to 7 percent annually for the last three years, and stockholder dividends have been increasing at a rate between 7 and 10.5 percent since the breakup of AT&T in 1984. Just last week, Ameritech reported an 11.3% rise in net income for the second quarter of 1990, a record.[1]

Another cross-industry comparison conducted in 1988 by Broadcasting Magazine put

[1] Communications Daily, July 19, 1990 at 3.

the net value of broadcast television at $40 billion. Asset value for cable was estimated at $90 billion. Yet, the value of the regulated local exchange telephone industry was estimated at $130 billion, more than 3 times larger than broadcasting and 1.5 times larger than cable.

But it is not just the size of the telcos which presents problems for those who argue on behalf of telephone entry into video programming. If that size is combined with control of content, the anti-competitive nature of that merger provides the specter of "super monopolies" with control over all the data transmission, telecommunications and video transmission facilities nationwide. Before members of this committee decide to leap into that new world of telecommunications, let us consider the history of the telephone industry.

Since its inception, the telephone industry has operated as what is called a "common carrier." That means that the phone company acts as a conduit for communications -- on a non-discriminatory basis -- for anyone who wants to pay to access their network. It also means the phone company itself does not have an economic interest in what is being communicated on its lines. It simply acts as a vehicle for others. Telcos also have a regulated rate of return, and as such, have an almost guaranteed level of earnings, unlike commercial broadcasters. This traditional role for telcos has obviously been profitable, given the size of the industry I have described and a lack of competition at the local level.[2]

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[2]For example, only 0.1% of the nation's telephone traffic accessing the long-distance network is delivered to long-distance carriers on bypass facilities as opposed to the local telephone exchange. Huber, Peter W., "The Geodesic Network: 1987 Report on Competition in the Telephone Industry," for the U. S. Department of Justice, January 1987, Table G.15 at 1.20.

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But in looking now at the possibility of telcos being allowed to enter the video marketplace, this committee ought to consider what could happen when telcos are no longer limited to being "common carriers." Once a phone company can own information services (and also be the distributor) and sell those services to customers, including cable television service, what is to prevent it from causing even worse abuses than cable has foisted upon consumers and broadcasters which prompted this committee to pass S. 1880 just a few weeks ago? The telephone industry is a monopoly. Customers have no choice but to use the local telco. Given that inherent advantage, the telcos' potential to cross-subsidize is far greater than anything imagined with cable.

If telcos are allowed into the cable TV business without proper safeguards, we could see the replacement of one monopoly -- cable -- by another -- America's huge telephone industry. How such a transfer of power from a 200-pound gorilla to an 800-pound gorilla would benefit the American people is extremely difficult to understand. When Congress passed the 1984 Cable Act, it inadvertently allowed cable to have its thumb on the scales of free competition. If you allow telco entry into content, as S. 2800 would, the huge telcos would, in effect, be standing on those scales.

Throughout this debate, the telcos have argued that unless they are allowed to enter the information services/video business, the laying of fiber optic cables which can facilitate video transmission and many other services to the home will be delayed. But the simple fact is that telcos already are laying fiber across the nation. Telco outlays each year for

capital improvements have been running about $20 billion,[3] much of which is the installation of fiber optic cable and the digital switching systems needed to operate it. Some have estimated that telcos have already laid more than 3 million miles of fiber optic cable.[4]

There have been many estimates made regarding the installation timetable for telco fiber-to-the-home services. One set of projections from Probe Research suggests that by the year 2000, 34 percent of households will be served by fiber in the feeder links, which is not actually into the home. Probe also estimates that in the most likely case, fiber would be installed in only about 10.5 percent of homes by 2000.

The fact that fiber is being deployed to the curbside is important. It is not necessary for telcos to put fiber all the way into American homes in order to provide video and other services. In fact, a report recently released by Bellcore suggests a strategy of fiber-to-the-curb, with "long-term migration of fiber to the home."[5] By running fiber down the street only, the telco then can attach coaxial cable from the curb into the home for the final leg of delivery. That fiber/coaxial hybrid will be able to transmit everything that consumers would want (including video) more economically and with certain technical advantages.

Still, it appears that even as telcos lay fiber, the potential competition they could bring to cable and other providers would be years away. But even if allowing telco control

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[3]"Phone Facts '89," United States Telephone Association at 3.

[4]Corning, Inc. figures.

[5]Communications Daily, July 20, 1990 at 9.

of content were to speed up that process by some factor, at what cost to American consumers would that take place? The destruction of all competitors? The vertical integration and cross-subsidy problems we will discuss? Mr. Chairman, that is precisely why this committee pursued S. 1880 as a prudent way to bring fairness back to the video marketplace while we await eventual development of fiber on a larger scale in the next century. Telco entry into content simply would nullify the positive results which that legislation can bring consumers and video competitors.

Another key question which you must ask yourselves is how the FCC will be able to adequately monitor such entry so that the regulated side of the telcos (their current telephone services) do not cross-subsidize their unregulated side (cable TV service, information service, etc.).

U.S. Judge Harold Greene in his Triennial Review Order[6] of 1987 pointed to a number of ongoing problems with trying to oversee the RBOCs. Judge Greene found:

> "...to the extent that there has been any recent change in the regulatory picture itself, it has been to weaken the regulations governing telecommunications carriers, not to strengthen them."[7]

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[6]United States of America v. Western Electric Co., 673 F. Supp. 525 (D.D.C. 1987).

[7]Id. at 569.

In fact, the judge found that because the companies operate in several states simultaneously, often with different levels of regulation, each is "essentially unregulated...to the point where the [FCC] 'cannot even look at the books and records'..."[8]

In 1981, the Commission had an authorized ceiling of 2,103 employees. Each year since, that figure has fallen. This year, the Commission is authorized at 1,750 employees, but has testified to a House Appropriations subcommittee that it needs another 266 full-time equivalent workers to "fulfill all of our regulatory responsibilities." In fact, the FCC told the subcommittee that delays may occur in introducing a number of new technologies, including broadband integrated networks.[9] If the FCC is 13 percent understaffed now, think of how ill-equipped it is to fulfill its new responsibilities if telco entry were to become a reality.

In fact, just last week, FCC Chairman Alfred Sikes said:

> "Our resources never seem to catch up...We face today a real resources problem...It scares me."[10]

[8]Id.

[9]Reply to questions asked for the record at House Subcommittee on Commerce, Justice, State and Judiciary Appropriations hearing, March 12, 1990.

[10]Communications Daily, June 20, 1990 at 3.

Let us look just at the RBOCs. Since the AT&T divestiture in 1984, there has been a "catch-me-if-you-can" attitude on the part of the Baby Bells. NYNEX has been fined $1.4 million by the FCC for overcharging customers tens of millions of dollars by overpaying a subsidiary for supplies. Southwestern Bell has been accused of violating the prohibition against manufacturing through its purchase and operation of Tsunami Technology Corporation and investment and management of Cycomm Corporation, and has been found to have improperly included $1.4 million in lobbying expenses in the company's regulated interstate rate base. Ameritech reportedly violated the prohibition against inter-exchange services. And U.S. West was found to have violated the MFJ in its pricing of access and other local exchange facilities. Pacific Telesis and Bell Atlantic were found to be improperly allocating inside wire costs (a competitive business) to regulated activities. And PacTel has just been accused of violating the MFJ through a new financial arrangement between one of its affiliates and a company that makes a radio system to track stolen cars.

The fact is that these companies are so big and complex that it is questionable whether a government agency can sort it all out for one company, let alone 7 large RBOCs and some larger independent telcos. The FCC clearly is understaffed for such a job. Even FCC Commissioner Andrew Barrett himself admits that detecting cross-subsidization is a difficult task at best.[11] If telcos become huge video/audio service monopolists along with

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[11]At the NAB '90 Convention in Atlanta, Commissioner Barrett pointed out that the FCC, with around 1800 employees, has only 5 Ph.D.'s in economics, while the Illinois Commerce Commission, where he previously served as Chairman, had 20 Ph.D's in economics out of just 500 employees, plus another 10 in business administration.

being local telephone service monopolists, think of the impossible task for the FCC in unraveling and detecting illegal cross-subsidies.

The issue of telco entry is a complicated one. But once the door is opened to video ownership, it will be impossible to shut. Without proper safeguards, telco entry will merely expand the potential for consumer abuse without creating any fair competition for cable.

Why Telcos Must Not Be Allowed to Control Content

Even without any kind of legislation, it is obvious that fiber delivery of information services will happen someday. Fiber is being laid and eventually the phone companies will be transmitting new services to customers. But who should control those services? Individual entrepreneurs or the telephone company itself?

NAB strongly contends that the most important safeguard in any telco entry must be a prohibition against any control of content by the same entity which owns the conduit. A quick look at the abuses by cable -- where cable operators who own an interest in cable programming have great incentives to favor that programming over other providers -- shows how anti-competitive such a connection can be.

Unfortunately, it is too late to rewrite the rules against vertical integration in the cable industry, although S. 1880 lays a framework for limiting the extent of such integration. But it is not too late to prevent this same situation from occurring in any telco entry into

the video and audio business.

Once fiber optics are in place, telcos will have the single wire with the most advanced technology. If they also are allowed to control the content of what they provide on their conduit to the American home, there is nothing to stop them from crushing the competition and becoming the sole source of all information services, including video, to the home.

For example, many members of Congress have already expressed their concerns about the siphoning of sports from free TV to cable. How much more pressing a problem will that be when a telco enters the bidding? How much longer would the World Series or Super Bowl stay on free television when Bell South or NYNEX purchases the rights? Not for one second.

Look at the cable record of denying carriage to local broadcasters or repositioning their channels in order to favor the programming in which the local operator has an economic interest. If your local phone company controlled your video service and provided content, it would have the same incentives to act in an anti-competitive way.

Telco entry into content has been based on the notion that there is an absence of entrepreneurs who have the interest or the resources to provide video services to the American viewing public. But the record is clear that numerous providers of video service would be standing in line to provide television services to the American people over fiber.

We do not need to allow the telcos to become television production houses to accomplish a diversity of programming options.

When conduit is mixed with content, the incentive and potential for anti-competitive behavior increases dramatically. That is why NAB so strongly opposes any telco entry which would allow any kind of editorial control on the part of the video provider.

NAB's position on telco entry is three-fold:

1. Telcos should come into the video marketplace only in an "overbuild" situation where they provide actual competition to existing cable systems. No competition is created when a telco purchases an existing cable system.

2. Telcos should provide video services only as common carriers.

3. Telcos should have no editorial discretion (control of content) over the video services they provide.

S. 2800 -- Why NAB is Opposed

Now that I have spoken in general terms about telco entry and NAB's overview, let me turn to the actual legislation being considered by this subcommittee. S. 2800, the Communications Competitiveness and Infrastructure Modernization Act of 1990, is an effort

by Senator Burns of this subcommittee, along with a number of other cosponsors, to allow limited telco entry into video programming. While I have the highest respect for Senator Burns, a former broadcaster, I do not believe his legislation will accomplish the goals for which it is intended.

Dangers of Cross-subsidies

To begin with, the whole premise of the telcos' argument that video programming control is needed in order to "jump start" the laying of fiber is based on a built-in cross-subsidy between its regulated entity (the phone system) and its planned unregulated entity (its video programming service). The bill attempts to lay out a strict separation between the video subsidiary and the telco, but then adds a provision which allows the FCC to waive such requirements if it determines that such a waiver serves the "public interest, convenience and necessity." Such a waiver system would weaken the separation even further.

This idea of having a separate subsidiary handle any video content sounds reasonable on its face, but the problem again is the ability to adequately monitor such a fiscal relationship between a telco and its video subsidiary. As I mentioned earlier in my testimony, cross-subsidization is virtually impossible to police. Think of the workload being dumped onto the FCC to look at the books of thousands of cable systems which would be operated by local telephone companies.

In short, we do not see nearly enough safeguards to allow telco entry, even as a subsidiary. Section 652 of the bill, which would force a telco to divest its subsidiary if found in violation of the cross-subsidy rules, still assumes that such cross-subsidies can be adequately monitored. Again, we see no evidence that the FCC has the manpower or ability to provide adequate scrutiny to thousands of interconnections between telcos and local cable services.

Precedent for RBOCs

Another concern revolves around Section 663 of the bill, which attempts to exclude the RBOCs from its provisions by denying telco entry to any phone company restricted by antitrust laws from owning such an interest in video operations. On this point, we have two concerns.

First, many independent telcos are large entities. You all noted the recent merger of GTE and Contel, making a combined operation with more than $19.5 billion in annual revenues.[12] This new company will become the largest phone company in America -- larger than any of the seven RBOCs.[13] Clearly, in those regions consumers will not be protected by the notion that telco entry is limited to independent telcos only. Market observers are suggesting that more such mergers of independent phone companies may be in the works,

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[12]Burgess, John and Quimpo, Margie, "Contel, GTE Agree to $6 Billion Merger," The Washington Post, July 13, 1990 at D-1.

[13]Schneidawind, John, "GTE to Buy Contel in $6.2B Deal," USA Today, July 13, 1990 at 1-B.

further complicating this concept.

Second, even though the bill purports to apply only to independents, it sets a clear precedent for future telco entry by the RBOCs, either legislatively or through the courts. Many believe that this year's U.S. Appeals Court ruling[14] on the RBOCs will lead in the very near future to the easing of restrictions on the RBOCs, particularly in the area of information services. Thus, while this bill attempts to exclude RBOC entry, such entry could be easily facilitated once such a court ruling takes effect.

Content "Controls" Meaningless

Shortcomings also are found in Section 653, which attempts to limit the amount of programming which the telco itself may control to one-fourth of its channel capacity. But while that protection sounds helpful, it is really illusory.

In a broadband fiber world, the choices facing the home user will be limitless. Given that kind of network, "channels" or limitations on content control have no meaning. How do you limit a telco subsidiary to controlling 25 percent of an infinite number of services? Even if a 25 percent capacity limitation has any meaning, this "safeguard" provides our stations or other information services providers with small comfort. Even a single "channel" would allow a telco to hire my best news anchor, bid up the price and

[14] United States v. Western Electric Co., 900 F.2d 283 (D.C. Cir. 1990).

acquire the best movie packages and syndicated programming, and gain the rights to my local sports programming. Given their vast resources, even "restricted" telco entry will allow these giants to put local broadcasters out of business.

Telcos, like cable but unlike broadcasters, would have no public interest obligations. Those obligations, as this committee knows, flow from the fact that the government must allocate the spectrum. At the seven LIN TV stations, we program 13.5 hours per day of news. The Senate has just passed legislation which re-affirms broadcasters' obligations to serve the child audience. Lowest unit rate rules provide candidates with discounted access for political advertising. In a world of monopoly broadband fiber networks, however, would Congress be able to impose similar obligations?

Beyond that, such ability to control services is still significant, and the incentives to favor the services in which the video provider has an economic interest over other offerings would still exist. If the telco controls even the "menu" of choices which confront the consumer, it would be fairly easy to structure that menu to the detriment of competitors. Similar accusations have been levelled, for example, against some airline computer reservations systems which were programmed to favor their flights over those of their competitors.

Video Gateway

S. 2800 also requires that a video "gateway" system be established to provide access to non-affiliated users. But among those other users could be other telcos' "limited" video offerings. It is conceivable that the major telcos could end up being the only video providers if they can market themselves successfully in other regions of the country. In addition, there is nothing to prevent telcos from combining in joint ventures to provide video services, thus increasing the likelihood of widespread anti-competitive activities. Here again, this provision is not adequate to prevent abuse.

Buyout Provision Loopholes

We applaud the provisions in Section 655 which would prohibit the buying-out of cable systems within a telco's service area, but even there, several loopholes exist. Telcos would be allowed a non-controlling ownership in cable systems through joint ventures. TeleCommunications, Inc. uses that very mechanism to maintain interests in nine cable programming services and 24 percent of cable MSOs. In addition, a waiver is allowed under certain circumstances, such as when a telco promises to upgrade a system with fiber optics, when it agrees to increase capacity and services offered, when such a waiver would "serve the public interest," or when such a waiver gains approval from a local franchising authority. But once fiber is deployed, none of these four conditions has any teeth. We believe there should be a total ban on buyouts because any buyout does not provide competition in the multi-channel marketplace.

No Real Control Over Increased Rates

Section 658 requires the FCC to establish, within six months, a federal-state joint board to establish practices and regulations to keep operations of video services separate from telco operations. Such a board would be charged with making sure that "no [telephone] customer pays more for such services than would have been the case if the carrier providing such services was not also providing video services." But here again, such a provision assumes that sufficient oversight can be provided against cross-subsidies. We seriously doubt that can be accomplished.

For example, telephone rate-payers are footing the bill now for the costs of laying millions of miles of fiber. If the installation of fiber is accelerated, the telcos will have needlessly replaced the existing copper wiring and coaxial cable which runs into millions of American homes and has many remaining years of useful life. These "stranded assets" for copper wiring alone could end up costing American telephone customers $61.6 billion.[15] Will more FCC auditors be hired to oversee these distinctions? The fact is that the legislation will take effect whether or not the FCC is staffed sufficiently to monitor such transactions.

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[15]Value of net unamortized investment in cable and wire, Statistics of Communications Common Carrier, FCC, 1988-89.

Meaningless "Must Carry"

Section 659 of the bill would require free carriage of local broadcast signals. While such a provision, given NAB's support for must carry legislation, sounds inviting, this concept again becomes illusory given the nature of future fiber optic networks. A concept like "must carry" means little in an age of unlimited channel capacity on switched networks. Beyond that, as we have already stated, allowing telco control of content replicates the cable model and its potential for abuses. We advocate a common carrier model for telco entry into video -- even if it means payment by broadcasters for access to that network -- over a model in which telco control of content is allowed.

There are also a number of other issues which the bill fails to address. For example, what happens if the subsidiary, after beginning operation, goes bankrupt? Will the telco be allowed to take it over, or will the rate-payers be forced to eat the huge start-up costs? Or what would happen if telcos, through their subsidiaries, operated their video systems like they operate their phone systems when it comes to charging for service? Will we see "meters" put on TVs? Will Americans be forced to pay per-minute to see the Super Bowl, or even their local free over-the-air broadcasting and public television?

Telco Entry -- Not the Solution

In conclusion, we see many unanswered questions and too many potential pitfalls to moving forward with telco entry at this time. If telcos are allowed control of content, the potential for abuse of competitors increases dramatically. At the same time, placing the power of both telephone service and video programming in the hands of some of the nation's largest corporations strikes me as hindering competition, rather than encouraging it.

If there is to be telco entry, NAB believes it must be on a common carrier basis with no control of content. We also believe that buyouts of existing cable systems by telcos should be prohibited, since they will provide no new competition for cable.

I know that some on this committee may be angry at cable and its past record of consumer and competitive abuses. We share many of those feelings. But we must not let emotion cloud our perspective on telco entry. Unrestricted telco entry will not bring about the promise of competition, and will instead subject American consumers and video competitors to more of the same problems we face now with the cable industry. I urge this subcommittee to reject the legislation, S. 2800, or modify it to meet the level of safeguards which we have proposed here today.

Senator INOUYE. Thank you very much, Mr. Chapman.

Now may I call upon the President of Washington Post, Mr, Simmons.

STATEMENT OF RICHARD D. SIMMONS, PRESIDENT, WASHINGTON POST CO., ON BEHALF OF THE MEDIA GROUP AND THE AMERICAN NEWSPAPER PUBLISHERS ASSOCIATION

Mr. SIMMONS. My name is Richard D. Simmons, and I am the President of the Washington Post Company. Today I am here as a representative of The Media Group. Altogether, our companies operate 67 television stations, 458 cable systems and over 60 daily newspapers. I also appear as a representative of the American Newspaper Publishers Association.

Like other members of The Media Group, the Washington Post Company has, I think, an outstanding record of service in both television broadcasting and cable television. Despite this, we cannot operate a television station where we have cable systems nor buy broadcast systems where we have cable. These cross-ownership restrictions have been in force for many years. Their premise is that the diversity of ownership of the means of communication is so vital and that the potential abuses of undue concentration of control are so contrary to the public interest that across-the-board prohibitions on entry into these competing businesses must be imposed.

Why should we or any company be expected to continue to respect and abide by such restrictions if the same diversity rules do not apply to local telephone companies which have a legally mandated monopoly on the telephone business in every city and town throughout this country? The virtually certain consequence of this legislation, if enacted, ultimately will be to permit telephone companies to take over the cable and television business and cause substantial harm to newspapers. For what reason? In the unsubstantiated hope that this might provide competition to existing cable operations over the long haul and might stimulate development of a fiber network infrastructure.

In fact, far from leading to more competition and greater diversity, telco entry would result in less competition and diversity and higher prices to the consumer. It is a simple matter of size. Telcos are huge. In 1988, as has already been testified, GTE alone had revenues of $16.5 billion. That was bigger than the entire cable industry which had revenues of $13.8 billion. The baby Bells together had nearly double the revenues of all daily U.S. newspapers combined, three times the revenues of all U.S. television stations, and over five times the revenues of all cable system operators and programmers. Some babies.

What is more, the telephone companies just do not play fair even under existing rules. If they are allowed into cable, even with all the supposed safeguards in the world, the telcos will be fighting them as hard and violate them as often as they have the current restrictions. Congress may be able to draw the line through legislation, but it will not be able to hold the line.

Cross-subsidization of rates, discrimination in the treatment of competitors, unfair restrictions on access to telco facilities, dispari-

ties in the quality of services made available to telco competitors and plain old-fashioned price gouging have all been employed by the telcos time and time again.

When The Post Company, my own company, was in the nonwire line cellular business in competition with telcos' cellular subsidiaries, the telcos repeatedly discriminated against us in favor of their own subsidiaries in terms of price, facilities and service. In Florida, for example, it required nine months of intense litigation on our part before Bell South's cellular subsidiary was ordered to restructure its rates to eliminate discriminatory pricing.

The risks that telco entry poses are overwhelmingly disproportionate to the supposed rewards. If fiber implementation is as important to the future economic and technological competitiveness of this country as is claimed, then the issue should be addressed directly. But fiber to the home should not be used as a stalking horse for telco entry into cable.

In summary, Mr. Chairman, we are willing to accept that some adjustments to the 1984 cable legislation may be desirable, but do not exact retribution on the entire cable industry, those of us who have responsibly grown in this business, and jeopardize the interests of the American public in the process merely to deal with the bad actors. Why assume that reasonable cable rate reregulation, "must carry" and other such regulatory measures which I would support will not be adequate to address consumer complaints? Why assume that the competitive forces other than telco that are emerging—wireless, cable and DBS—will be ineffective? Caution ought to be the order of the day.

If telco entry is authorized now and independent cable systems, television stations and even newspapers fall by the wayside as a result, it will be difficult—let us be frank, it will be impossible—for the Congress of 1996 or anyone else to turn back the clock and reverse telco entry.

Thank you.

[The statement follows:]

STATEMENT OF RICHARD D. SIMMONS, ON BEHALF OF THE MEDIA GROUP AND AMERICAN NEWSPAPER PUBLISHERS ASSN

My name is Richard D. Simmons. I am President of The Washington Post Company. In addition to publishing two newspapers and Newsweek, we own four television stations and 56 cable systems, all of which are locally managed and, we believe, provide excellent service.

In recent months we have worked informally with a number of other companies that also have extensive interests and experience in both cable and television operations to develop common recommendations on certain basic issues in the cable re-regulatory debate, such as telco entry. I represent that loose confederation, called the Media Group, here today. Altogether, these companies operate 67 television stations, 458 cable systems and over 60 daily newspapers. See list of Media Group members at Attachment I.

Our company is also a member of the American Newspaper Publishers Association, an international association of more than 1400 newspapers; and I appear in that capacity as well. There may be occasions today, however, where I will express a view on issues as to which either the Media Group or ANPA or both has taken no position.

We are deeply concerned about the telco/cable issue because of its potential impact on our television, cable and publishing operations. I personally am concerned about what telco entry into cable would do to my television and cable service, and to my telephone bills. But your concern about

telco entry must go ultimately to the public interest, to society's welfare, including the fundamental premise that diversity of ownership of the means of communications is of vital importance to this country and to the American people. On those broader, public interest criteria I urge you to consider four points: (1) the risks created by this legislation would be enormous; (2) the promised benefits from the bill are not likely to be realized; (3) the assumptions that the bill's safeguards can be enforced and its limitations preserved are unrealistic; and (4) it is rash to permit telco entry now, since it can always be authorized in the future, but once it is authorized, it will be difficult if not impossible to undo.

I.

Telco entry threatens no less than the destruction of local cable and television service and the crippling of local newspapers. Far from leading to more competition and greater diversity, telco entry would result in less competition and diversity and in greatly impoverished cable, television and newspaper service.

Since the passage of the Cable Act in 1984 there has been a blossoming of media competitors with cable systems, but not in the form that some expected, i.e., not in the form of cable systems competing head-to-head with each other in the same franchise area. The reason you don't have two systems operating side-by-side, other than in a handful of communities, is a simple matter of economics. It is not profitable to invest in all the expensive equipment it takes to create a modern

cable system in order to serve only a portion of the market. Thus, when two systems are operating side-by-side, each reduces charges until one or the other goes out of business. Such conflicts result in very heavy costs to the communities they serve, costs that are in large part borne by consumers.

Given the telcos' vast resources and ability and predilection to cross-subsidize, it is not hard to foresee that telephone-owned cable systems will drive independently owned cable systems out of business in such side-by-side situations. Nor are likely telco abuses limited to cross-subsidization. Discrimination in the treatment of competitors, unfair restrictions on access to telco facilities, disparities in the quality of services made available to telco competitors and plain old price gouging have all been employed by the telcos time and again. That's why Congress had to pass the Pole Attachment Act of 1978 and why the FCC continues even to this day to attempt to limit excessive telco charges for cable access to poles and conduits. That's also why when The Washington Post Company was in the nonwireline cellular business in competition with the telcos' cellular subsidiaries, we suffered such shabby and discriminatory treatment in trying to obtain interconnection with telcos' central switches.

And if the telcos become the sole surviving cable operators in many communities, will broadcasters and newspapers be able to survive as independent entities competing with those monoliths? Broadcast television would find itself in a losing

battle to retain old, and line up new, programming in competition with the telcos' cable systems. Audiences and advertisers would follow programming to the telephone companies' own channels. Consequently, as an FCC study itself has pointed out, local television service would at best survive as only a second-class medium.

Telephone companies would similarly move into electronic news and information dissemination, particularly as the vitality of broadcast television is sapped by telco incursions. They would also invade newspaper advertising and undercut newspaper viability in this way as well. In the Media Group's view, investments in newspapers would, as a result, slow down or dry up. Regrettably, the total number of daily newspapers in this country is in decline, and many papers, large and small, have succumbed to economic pressures. Congress and others have expressed grave concern about this trend and its broader implications. Telco entry into cable would greatly exacerbate this problem.

In their competitive battles with television stations and newspapers, telcos would have advantages similar to those they would enjoy against independently-owned cable systems: they would own and control the principal, and eventually the only, conduit into the home and they have immensely larger resources than their television and newspaper competitors.

Let me illustrate this last point. The Washington Post Company which is regarded, I hope, as a large and healthy media company is puny relative to the telcos. Our 1990 first quarter revenues, for example, are roughly one-tenth the size

of a single baby Bell and one-fifteenth the size of GTE-Contel. And in 1988 the baby Bells together had nearly double the revenues of all daily U.S. newspapers combined, three times the revenues of all U.S. television stations and over five times the revenues of all cable system operators and programmers. See Attachment II.

II.

In terms of the supposed benefits of this bill, telcos hold out the promise of (i) more competition -- and hence better service and lower prices for the public -- and (ii) the building of a fiber optic network reaching into every home in the country. But these ambitious benefits are unlikely to be achieved.

The benefits of telco competition in the cable field depend on whether competing systems can in fact operate side-by-side over a sustained period of time. The evidence is that that will not happen, and that true and continuing competition for cable will come not from a second cable system, but rather from other media, including broadcast television, video disks, so-called wireless cable and direct home reception of satellite services.

Over-the-air television does compete with cable and compete very effectively. Where few stations are available, cable companies often attract 80 to 90 percent of the potential subscribers. Where good over-the-air service is available, cable penetration tends to peak at somewhere between 50 and 60 percent. Moreover, some 70% of cable viewing is of local broadcast stations.

The ubiquitous video stores compete vigorously with HBO and with other premium cable channels and pay-per-view services. In fact, rates for premium channels have remained flat since deregulation, and many viewers decline premium services. Wireless cable operations are growing, and direct reception of satellite services is too (at the rate of 30,000 new installations per month). Direct satellite-to-home broadcast service is another potential competitor, as some of the world's largest companies with programming capabilities of their own have announced their readiness to invest hundreds of millions of dollars in those ventures.

None of these services, standing alone, is a perfect substitute for cable. But each of them is competitive in its own way, and collectively they represent a level of competition and diversity of programming, particularly in terms of satellite reception, that is going to increase greatly in the near future.

The promise of universal fiber is the second major reason offered up by the proponents as justifying telco entry. It is as though this were a solution to all of the nation's economic ills. If telco can only take over the local cable business, fiber will be laid to every American home and the country's competitiveness in the global marketplace will be assured, so we are told.

These promises, however, cannot obscure some important facts. In the first place, both cable systems and telcos are laying fiber now. In the second place, the cost of a

universal fiber network to the home will probably be at least a half a trillion dollars, even by some telcos' estimates, and would be accomplished in 30 years, if ever. How much of that capital will telcos derive from their cable television businesses? If they would earn from cable only a small fraction of what they need to support this half trillion dollar investment, then telco entry into cable is not likely to materially advance the building of a fiber network. If, on the other hand, the telcos are going to make a lot of money in cable to support such an investment, then that means that the telcos will have to be the sole survivors in cable, as well as dominant participants in television and electronic news and advertising. Since the total annual revenue of both cable systems and programming operations currently amounts to an estimated $16.8 billion, telcos are not likely to finance much of their promised universal fiber to the home from cable operations, unless they totally dominate cable service in the future.

Moreover, if fiber implementation is as important to the future economic and technological competitiveness of this country as is claimed, then the issue should be addressed directly. There may be other, far more effective ways of getting fiber to the home, not just to the curb. And there is the more fundamental issue of how high a national priority ought to be placed on the universal fiber goal. For example, how will consumers benefit, what will universal fiber cost, what will we have to forego, as a society, in order to invest so much in fiber, and since telcos don't own a patent on fiber, who should provide it?

In any event, fiber should not be used as a stalking horse for telco entry into cable. The latter simply will not support the huge investments of the former.

III.

The bill s sponsors concede that telco entry would pose grave risks, and attempt to reduce those risks through various legislative safeguards. But experience and common sense indicate the safeguards won't work.

The history of telephone company discriminatory practices based on its exclusive conduit to the home goes back to the early part of this century. For example, in the 1920's AT&T entered the radio broadcast business and refused to lease its long distance facilities to rival broadcasters. In the late 1940's AT&T monopolized long-haul transmissions for the new television medium by refusing to interconnect with competitors.

The pattern continues. Within the past several months, a grand jury indicted Nynex for violating the Consent Decree by selling computer data processing services to MCI. The Wisconsin Public Service Commission recently found that millions of dollars of Ameritech costs have been improperly loaded into the rates of Bell customers in Illinois, Indiana, Michigan, Ohio and Wisconsin. And in the largest telephone rate regulation case in its history, the Georgia Public Service Commission found that Southern Bell is overcharging its customers by $180 million per year. These are but a few examples.

While the legislation would direct the FCC to protect against cross-subsidization, the Court of Appeals has within

the past few weeks held that the FCC's safeguards against telco cross-subsidization in information services are inadequate. Moreover, the GAO has said that the FCC, with its present resources, could not check particular telco/cable operations more than once every 16 years (and that is before the FCC gets the job of policing telco participation in the video business). An awful lot of television stations, cable systems, newspapers and members of the public could be injured in that time frame. A 1989 FCC policy paper said it would be "perpetuating a fiction" to think cable TV costs could be readily distinguished from the costs of other services using the same broad-band network. And Judge Greene has said that it is more difficult to detect and prevent cost-shifting by the telcos today than it was before AT&T was split up.

The so-called death penalty provision in the bill, requiring telco divestiture of cable if cross-subsidization has been found to have occurred, is unlikely to work because its very severity will mean that it won't be used very often if at all. One of the arguments telcos would use against divestiture, for example, would be that they would be left with broad-band networks that they could use for few other purposes, so that telephone rates would skyrocket and telephone subscribers would be stuck with the consequences.

The argument that this bill would not permit the Bell companies to provide cable programming -- because it would repeal only one of two existing restraints -- is also small

consolation. This bill would allow entry into cable by the largest single local telephone company in this nation, GTE. That company, which will be even larger now that it is merging with Contel, already has revenues greater than the entire cable industry and almost as great as the three leading broadcast networks combined. Further, the ink will not be dry on this bill before the Bell companies will be pressing for modification of the consent decree to permit their entry into cable and into information services generally

IV.

Driving the current move toward new cable legislation is the widely held belief that mistakes were made six years ago when Congress adopted the Cable Communications Act of 1984. We do not share that belief because the deregulation effected by that legislation resulted in a massive upgrading of cable's physical plant and huge investments in program development -- all producing greatly improved cable service to the American public. For example, cable's annual investments in basic programming have jumped from $300 million in 1984 to nearly $1 billion in 1989. When premium cable network programming costs are included, cable's annual programming investments have doubled from $1 billion in 1984 to more than $2 billion in 1989. And investment in rebuilding or upgrading cable plant and equipment has increased from $700 million in 1984 to $1 billion in 1989. Since 1984, homes passed have increased from 71% to 89%, and subscriber levels have increased from 43% to 57%.

But the premise that even Congress makes mistakes has implications for the substance of, as well as the need for, new cable/telco legislation. If Congress pushed the pendulum too far in one direction in 1984, isn't there a risk that you now are about to pull it back too far in the other direction in 1990?

In short, even if some adjustments to the 1984 legislation are desirable, caution ought to be the order of the day. Why assume that reasonable rate reregulation, rifle-shot provisions to deal with bad actors, and must-carry -- all of which our company and many others can accept -- will not be adequate to address consumer and other complaints? Why assume also that existing and emerging competitive forces other than telephone cable television will be ineffective? Five or six years from now, if Congress still hears the complaints it has been hearing in recent months, perhaps another look at telco entry would be appropriate. We do not believe Congress will ever have to turn to that highly inappropriate last resort. But the critical point is that, if telco entry is authorized now and independent cable systems, television stations and even newspapers fall by the wayside as a result, it will be difficult or impossible for the Congress of 1996 or anyone else to turn back the clock and reverse telco entry.

* * *

As I noted at the outset, The Washington Post Company and other members of the Media Group are in the cable television and television broadcasting businesses, and many are also in the newspaper publishing business. We have, I think,

outstanding records of achievement and service to the public in each of those fields. Despite our exemplary records, we cannot operate television stations where we have cable systems, or buy broadcast stations where we have cable. For example, the Post Company cannot acquire a television or even a radio station in Washington, D.C., today because of our ownership of the newspaper.

These cross-ownership restrictions have been in force for many years. Their premise is that diversity of ownership of the means of communication is so vital, and that the potential abuses of undue concentration of control are so contrary to sound public policy, that across-the-board prohibitions on entry into these competing media businesses must be imposed. While we at the Post and others in the Media Group and ANPA sometimes chafe under these restrictions, we understand them, abide by them, and do not ask that they be eliminated.

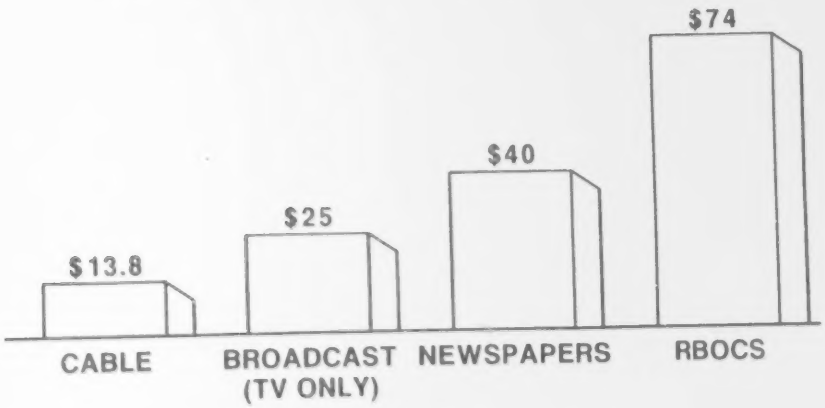
But why should we be expected to continue to live by these restrictions if the local telephone companies, which have a legally-mandated monopoly on the telephone business in every city and town throughout the country, are allowed to take over the cable and television business and cause substantial harm to newspapers on the unsubstantiated hope that this might provide competition to existing cable operations over the long haul and might stimulate development of a universal fiber network infrastructure?

Telco entry would be a drastic measure not only because of its consequences, but also because of its departure from well-established public policy. Repeatedly over the years Congress has insisted that entry into competing media businesses be regulated. The breakup of the old AT&T and resultant restrictions on the surviving monopolies are consistent with that tradition of fostering diversity of control. So also are the various restrictions that apply to all telephone companies. Before Congress abruptly and drastically reverses that fundamental policy by sanctioning telco entry into cable, we urge that you give some of the other regulatory measures you are considering a chance to work first.

WASHINGTON POST CO. VS. BABY BELLS

1ST QUARTER 1990	NET INCOME	REVENUES
NYNEX	$291.4 MILLION	$3.30 BILLION
PACIFIC TELESIS	262.0 MILLION	2.37 BILLION
BELL ATLANTIC	355.3 MILLION	3.02 BILLION
US WEST	271.9 MILLION	2.43 BILLION
AMERITECH	303.5 MILLION	2.60 BILLION
SOUTHWESTERN BELL	247.8 MILLION	2.13 BILLION
BELLSOUTH	423.2 MILLION	3.52 BILLION
TOTAL	$2,155.1 MILLION	$19.37 BILLION
WASHINGTON POST CO.	$ 39.0 MILLION	$ .34 BILLION

CABLE, BROADCAST AND NEWSPAPER INDUSTRIES VS. BABY BELLS



ANNUAL REVENUES - 1988
(in Billions)

Senator INOUYE. Thank you very much, Mr. Simmons. Now, the publisher of the "Morristown Citizen Tribune," Mr. Fishman.

STATEMENT OF JACK FISHMAN, PUBLISHER, MORRISTOWN CITIZEN TRIBUNE

Mr. FISHMAN. Thank you, Mr. Chairman, Senator Gore, other members of the Committee. I am the publisher and editor of the "Citizen Tribune" and President of Lakeway Publishers, which has a few small newspapers in Tennessee.

I have served as President of the Tennessee Press Association, and I am also a member of the Board of Directors of the National Newspaper Association and Chairman of its Government Relations Committee. I am here to address the issue of telephone companies distributing video programming and other information which they own over their own facilities.

First of all, I would like to take this opportunity to thank you and Senator Gore and the other senators for their help in this particular vital issue of bringing rural America into the Information Age. It is of vital interest to the small newspapers of this country that we do ensure that rural America is not left out of the Information Age.

NNA believes that moving rural America in this direction is a very important national function. As consumers, we appreciate this Committee's efforts to curb the get-rich-quick cable operators who have attached themselves to Tennessee, as our famous Senator can tell you, in an expression like we call, "attaching ticks to bloodhounds." And he will understand what that means.

We also say that the bill you are considering today is the wrong way to do the right thing. The champion you have chosen for rural America, the telephone companies, have a track record of cable service to rural America, and that track record proves them to be reluctant champions at best.

As members of this Committee know, telephone companies have been able for the past 20 years or so to operate cable television systems in rural communities of less than 2,500 folks, or in rural areas where there are 30 or fewer homes per mile. Further, I understand that waivers have been granted in other communities, and that in 20 years of waiver requests the FCC has granted almost 400 and has denied only five.

The phone companies have also had the ability since 1984 to serve larger communities where no other cable service was offered, if granted by the Federal Communications Commission.

What have the telephone companies done with this opportunity to serve rural and small-town America? Well, according to the statistics that I asked for and got from the National Cable Television Association, phone companies have built fewer than 400 systems in all the 26,000 communities with populations of 2,500 or less throughout the country. Only eight, Senator, are in the State of Tennessee.

In other words, they are serving fewer than 1 million of the 65 million people who live in small-town and rural America. This is the telephone companies' record in rural America using inexpensive coaxial cable technology. To see them coming to Washington

now, promising to bring much more expensive fiber optic technology to rural America, only if Congress lifts the cable-telephone cross-ownership restrictions, well that seems a little puzzling to me.

For one thing, it will cost a lot of money. How much money? Heavens, in a small town like ours and a small newspaper like mine, I do not understand what $1 trillion is, but that sounds like a lot of money on my phone bill to me.

Senator Burns says it will not affect my phone bill, since there are "safeguards" in his legislation to keep the phone companies from using ratepayer money to subsidize their entry into the television business. There is even a death penalty provision which says if the phone companies are caught using that money they are out of the cable business. They will be kicked out of the cable business.

Who is going to pay for all that new wave of technology, that age of fiber optics if they are kicked out? The guy down at the Pizza Hut, the farmer who wants to call the feed store, the grandmother who wants to talk to her grandchildren. Cost is a factor. Control is another factor, a bottleneck factor that I urge you to please consider.

One of the recurring nightmares is that the Postal Service would one day decide to get into the newspaper business in Tennessee and position its newspapers against mine. So what, you may ask? Are you afraid of a little competition? If you know the history of the "Tribune," you would not ask that question.

The "Tribune" started from scratch against a 100-year-old daily and Sunday, and we were successful in that endeavor—one of the few in the country. But we could not be successful against the Post Office. That is a bottleneck we could not break.

The Post Office delivers most small community newspapers, and if the Post Office goes into competition with our papers, I know whose paper is going to be delivered on time and whose paper is going to pile up at the Post Office—inadvertently, of course, Since the Post Office would not do anything like that.

I know which newspaper is going to sell for a nickel less than mine, and which one is going to have an army of special correspondents dressed very much like carriers who go to every home and business in the community every day and report back everything interesting that they hear, even though elaborate safeguards are in place with an absolute guarantee that these sort of things will not happen.

How long could we last in small-town America, and small newspapers in this type of competition? About as long as the cable system or TV station would last if you let the telephone companies "compete" with them in the video programming business and at the same time let the phone companies own the content of the programming they are distributing.

I have no doubt that the next step would be an electronic newspaper beamed into the home over the same single wire. Of course, electronic newspapers competing with me would be fine. I do not fear that, so long as I do not have to pay them, the telephone companies, to deliver my electronic newspaper.

It would be just like the Post Offices. Let the phone companies of this country merge their monopoly control of the phone system and their enormous wealth with control of the media, and they will tell

you, Senators, what you want to know, show you what they want you to see, and charge you what they want to charge. Instead of calling them "Ma Bell" we will be calling them "Big Brother," and the phone companies will say, "Is that not efficient?" and, "How effective it is."

Gentlemen, my town, rural America, did not have dial telephone service in 1958. We still do not have cellular phone service a year after the license has been granted to telephone companies, and I have written my Senator—and I will not mention any names—several times about that.

Why? The folks in the city have had this service for years. Could it be because, obviously, the telephone companies want to go where the big bucks are and where the big markets are to make a big profit. I suspect that that is true, and I do not blame them, but that is not going to help rural America.

Am I overreacting? I hope so. But consider this: if I am wrong, all I have done is embarrass myself before a Committee of Senators, very distinguished Senators, in Washington, that are trying to help rural America. On the other hand, if I am right, we in rural and small-town America will suffer higher phone bills, fewer sources of local information, fewer jobs and more likely all three. Cable might need some fixing, Mr. Chairman, but please do not give us the solution that is worse than the problem.

Thank you very much.

[The statement follows:]

STATEMENT OF R. JACK FISHMAN, ON BEHALF OF THE NATIONAL NEWSPAPER ASSOCIATION

Mr. Chairman, members of the subcommittee, my name is R. Jack Fishman, and I am editor and publisher of the Citizen Tribune, a daily and Sunday newspaper in East Tennessee with a circulation of about 24,000. I also serve as president of Lakeway Publishers, Inc., which owns six other newspapers in Tennessee, whose circulations range from 6,000 to 8,000 each. I am a member of the board of directors of the National Newspaper Association (NNA), and for the past year I have served as chairman of NNA's Government Relations Committee. I have also served as president of the Tennessee Press Association and as chairman of the Economic Development Board for the State of Tennessee.

The National Newspaper Association is a national trade association representing the interests of small daily and weekly newspapers throughout the United States. Founded in 1885 and with more than 5,000 members, NNA is the oldest and largest national trade association in the newspaper industry.

I am here to address the issue of telephone companies distributing video programming and other information which they own over their own facilities, and I appreciate this opportunity to tell you why the 5,000 members of the National Newspaper Association -- many of which are smaller-town and rural newspapers like the Morristown Citizen Tribune -- oppose this legislation sponsored by Senator Burns.

R. Jack Fishman
July 23, 1990

Let me say at the beginning that, as newspaper publishers and as leaders of our communities, we appreciate Senator Burns' and others' interest in ensuring that rural America is not left out of the Information Age. Indeed, as the representative of the rural newspapers of America, NNA believes that moving rural America into the electronic information age is a very important national goal.

Further, although NNA has absolutely no position on any cable television or broadcasting legislation or issue except this one, I know that I myself and many of our individual publishers, as consumers, appreciate this Committee's efforts to curb the abuses of some of the "get-rich-quick" cable operators in Tennessee and throughout the country.

But we must also say that the bill you're considering today is the wrong way to do the right thing.

The champions you have chosen for rural America -- the telephone companies -- have a track record of cable service to rural America, and that track record proves them to be reluctant champions at best. As members of this Committee know, telephone companies have been able for the past twenty or so years to operate cable television systems in rural communities of less than 2,500. Further, they have been able to have the cable-telephone cross-ownership restrictions waived in other rural areas where there are 30 or fewer homes per mile under one set of standards, and these restrictions waived in all other areas under another set of standards.

Further, I understand that such waivers have been readily granted, and that in twenty years of waiver requests, the FCC has granted almost 400 and has denied only five.

The phone companies have also had the ability since 1984 to serve larger communities where no other cable service was offered, or where they could show some other good cause, through waivers granted by the Federal Communications Commission.

What have the telephone companies done with this opportunity to serve rural and small-town America? Well, according to statistics I asked for and got from the National Cable Television Association, phone companies have built fewer than 400 systems in all the 26,000 communities with populations of 2,500 or less throughout the country, and not very many in Tennessee.

In other words, they are serving fewer than one million of the 65 million people who live in small-town and rural America.

This is the telephone companies' record in rural America, using cheap coaxial cable technology. To see them coming to Washington now, promising to bring much more expensive fiber optic technology to rural America -- but only if Congress lifts the cable-telephone cross-ownership restrictions -- makes me wonder a bit.

R. Jack Fishman
July 23, 1990

For one thing, it will cost a lot of money. I hear estimates of half a trillion dollars, which sounds like bad news for my phone bill. Senator Burns says it won't affect my phone bill, since there are "safeguards" in his legislation to keep the phone companies from using ratepayer money to subsidize their entry into the television business.

There's even a "death penalty" provision which says if the phone companies are caught using that money, they're out of the cable business. But if they are kicked out of the cable business, who's going to pay for all that New Wave Information Age fiber optic technology? The guy who runs the Pizza Hut? The farmer who wants to call the feed store? The grandmother who just wants to talk to her grandchildren? Or my reporters calling in stories to my newspaper? It certainly wouldn't be the subscribers of the telephone-owned cable-TV services.

Even more important than the question of cost, however, is the question of control -- bottleneck control.

One of my recurring nightmares is that the Postal Service would one day decide to get into the newspaper business in East Tennessee, and position its newspapers against mine. Why would that be a problem? Well, my small newspapers are delivered by the Post Office to most of my subscribers, and that's a bottleneck I can't break.

And if the Post Office Post goes into competition with my smaller papers, I know whose paper is going to pile up at the Post Office for a few days. Inadvertently, of course.

I know which newspaper is going to sell for less than mine, whatever I charge, and which one is going to have an army of special correspondents, dressed very much like letter carriers, who go to every home and business in the community every day and report back anything interesting they saw or heard, even though there are elaborate safeguards in place which absolutely guarantee that these sorts of things won't happen.

And I know which merchants are going to advertise in the Post Office's newspapers (if they want to be sure their mail gets delivered), and which ones will stick with my papers.

How long would we last in the face of that kind of "competition"? Not very long.

In fact, it seems to me that we would last about as long as a cable system or a TV station would last if you let the phone companies "compete" with them in the video programming business and at the same time let the phone companies own the content of the programming they are distributing.

I have no doubt that the next step would be an electronic newspaper beamed into the home over the same single wire. Of course, electronic newspapers competing with me would be fine by me, since I surely would have one of my own, so long as they are not owned by the company over whose lines I had to deliver my own electronic products.

Let the phone companies of this country merge their monopoly control of the phone system and their enormous wealth with control of the media, and they will tell you what they want you to know; show you what they want you to see; and charge you what they want to charge.

Instead of calling them Ma Bell, we'll call them Big Brother. And the phone companies will say, "Isn't this efficient?"

Am I overreacting? I hope so. But consider this: if I'm wrong, all I've done is embarrass myself before a committee of Senators in Washington. On the other hand, if I am right, we in rural and small-town America will suffer higher phone bills, and monopolistic control of our sources of local information.

Cable might need some fixing, Mr. Chairman. But don't give us a solution that's worse than the problem.

Senator INOUYE. Thank you, Mr. Fishman.

Senator Gore.

Senator GORE. Thank you, Mr. Chairman. I hope the FCC is watching C-SPAN today to see what heat is being put on us to get this cellular telephone service out to Morristown. And we are working on that. And I want the record to reflect that I am opposed to the Post Office going into the newspaper publishing business.

And I will elaborate on those comments for the record.

I have only two questions. First, Mr. Fishman, and I want to say Jack, obviously you and I have discussed the concerns of publishers about the potential entry of telephone companies into information services, as now prohibited by the modified Final Judgment in the wake of the AT&T divestiture. Senator Burns' bill allows only the independent and cooperative telephone companies to compete with local cable services, keeping MFJ restrictions in place.

Now I know some people say, well, it is a slippery slope, and all that, but if you assumed for a moment that the bill, as written, is what was passed and kept in law, would this continued restriction on the Bell Companies satisfy most of your concerns?

Mr. FISHMAN. I do not really think so, Senator. I think, very simply, the problem of when the telephone companies—either the telephone companies or—you all have got acronyms for those things and I do not understand what those things are—but smaller telephone companies—I do not think smaller telephone companies are simply smaller telephone companies. I think that any time that you let somebody that owns the line also own the information that goes over that line, that's a very dangerous precedent to follow.

Senator GORE. All right. I will have other questions after reviewing the record. I did have one question, briefly, for Mr. Hostetter, who has appeared here previously at the Committee. Good to see you again. While this hearing specifically deals with telephone company entry into cable, I would like to ask you a brief question about recent developments on cable rates. Because, after all, skyrocketing rate increases have stimulated the interest in fostering competition, not only from telephone companies, but satellite dishes and other technologies that have been mentioned here before.

Since this Committee passed a bill to allow modest deregulation of basic rates, we have seen a number of reports of cable operators rushing to retier services, seemingly to avoid regulation of those cable services most watched by consumers. Now I know you are familiar with this. It has been all over the trade press, and the conversations in the industry have been very intensive on this.

A recent analysis from within the programming industry reported that retiering would increase basic cable rates from an average of $18.75 to $29.86, an increase of 58 percent. Now, Mr. Hostetter, are cable operators retiering to increase their profits, to avoid regulation, or what?

Mr. HOSTETTER. Senator, I am unaware of the study that you refer to, although I would be happy to respond in writing if you could make it available. I think there has been, both from this Committee and from the House Committee, quite a clear signal that the congressional concern is to create and regulate a basic

broadcast tier. And I think there has been a pattern demonstrated in the industry to try to establish and define that tier of services in local markets. I think it is strictly in anticipation of what appears to be the direction of pending regulation.

Senator GORE. Well, I think that it is a very troubling trend. And I am just wondering whether the Congress and the FCC ought to take steps to ensure that cable customers are not further gouged by these clever retiering schemes.

Mr. HOSTETTER. Well, let me make a point. I know there was a widely read and prominently displayed article here in the "Washington Post" within the last 10 days related to Montgomery County. And I would simply point out that whatever they do there will be subject to FCC determination of what the proper rate is for the basic service.

I think once this retiering has occurred and you have defined the regulated service, whether the proponents believe it ought to be offered at $18 or whether the FCC determines it ought to be offered at $10, the FCC has the authority to set that rate.

Senator GORE. Well, I will just put into the record by reference, Mr. Chairman, the article from a publication called "Electronic Media" about the recent trade association meetings that cites this industry study about retiering.

And it a hot topic out there right now because it can be another form of gouging, depending on how it is done. And it needs to be looked at very closely.

Thank you, Mr. Chairman.

Mr. HOSTETTER. If I may. I would just like to state for the record, when I was here earlier, Senator, you are aware, I brought before you our rate changes since 1986, when deregulation went into effect. And our rate for the average customer has gone up approximately 5 percent per year since deregulation. I think there are a number of responsible operators in this industry with a similar pattern. And if we look at a longer time period, if we go back to the 1970s, our rates have not kept up with changes in the cost of living; we are running behind the CPI. And we have more than quadrupled the services that are being offered.

So I do not think there is a general criticism that can be raised about the cable industry and their rate practice.

Senator GORE. Do you plan to retier to deal with regulation?

Mr. HOSTETTER. We already have a broadcast-only tier in almost all of our systems. And in those systems where we do not have those tiers, we will institute one.

Senator GORE. Are you planning to change the allocation of cables to your basic tier and other tiers?

Mr. HOSTETTER. I am sorry, I do not follow the question?

Senator GORE. Are you planning to retier? You say you already have a tier. Are you planning to change which stations are in that?

Mr. HOSTETTER. I think the whole thrust of S. 1880 here and the companion bill in the House will be to require cable operators to identify a tier of broadcast services which will be offered on a regulated basis. So I think we will have to separate out——

Senator GORE. So that is a guess?

Mr. HOSTETTER. Yes, sir. I mean I think it is what your legislation requests.

Senator GORE. Well, I think we have to look at that. It does not request that you change around the rate structure in that way, the way some of these systems are doing it. But I have gone past my time.

Thank you.

Senator INOUYE. Thank you.

Senator Burns.

Senator BURNS. Thank you, Mr. Chairman.

While we are sitting here, I want to answer a couple of items that have been mentioned about the phone companies that will buy up cable companies. And I think that it should be brought to light right now that there are a couple of fire walls, or safeguards, in here. Number one, the FCC waiver is required for a buyout, and local government franchisers have an absolute veto power over a buyout. So there are some safeguards as far as the competition is concerned.

And while it appears at first glance that this panel of industry witnesses is a little on the unbalanced side, I noticed also on closer examination that we may be just one on one. I think it should be pointed out at this time, a quick check of various industry yearbooks, including the 1990 Broadcasting Cable Yearbook, reveals a highly interrelated industry that controls the information flow of most American households. Today many cable systems are under the ownership and share joint ownership in organizations which might appear in competition to cable television in terms of information control.

In fact, we found at least 20 organizations with interest in all three segments of what we are talking about here today, broadcast, newspaper, and cable.

Another 80 have ownership or control over cable and broadcast.

And finally, at least 58 others have ownership or control over both publishing and broadcast.

Now in light of that information, with such a substantial amount of cross ownership between your industry, that suggests why so many folks would come out and oppose this kind of legislation. So I would ask Mr. Chapman, is this not really just an example of entrenched American business making a protectionist argument that is "no competition is fair competition"?

Mr. CHAPMAN. Senator, I would suggest, first of all, that the television industry as we know it today, is placed in an uncompetitive environment. For the last two years this Committee has had 10 hearings on trying to regulate the person that owns the conduit and the content. That was the objective of this Committee. And we now have legislation that addresses that.

I would suggest that going to this bill would reintroduce that same model that became so troublesome for America. That is, where the person that owns the content also controls the conduit. I think with regard to the provisions for security, the safeguards, they are riddled with loopholes, exemptions, and waivers. Non-controlling interests, as you well know, would be one.

And of course, with fiber, it would be possible to almost upgrade and expand any system today in America. So we believe with fiber everyone would be entitled to an exemption.

If so, we would be returning to the model that did not serve America very well, and we believe that that would not be in the interest of either the consumer or the broadcasting industry, which could very well be dead and buried by the time the death penalty is invoked.

Senator BURNS. Let us take a look at your own industry. You say on rules and regulations the FCC imposes rules on the broadcasting industry; is that not correct?

Mr. CHAPMAN. That is correct, sir.

Senator BURNS. Do they work for you?

Mr. CHAPMAN. They work for us.

Senator BURNS. What would suggest that they would not work under this kind of legislation as far as the telcos are concerned?

Mr. CHAPMAN. Let me quote two FCC commissioners in that regard. We have two commissioners who have gone on record. One of them, Commissioner Duggan, suggests that the FCC would have to build a 60-story building in Rockville to regulate this industry. Commissioner Barrett talked about his days when he was at the PUC in Illinois where they would drive up three 18-wheelers with records and say to them go to 18 boys."

The FCC is simply not in a position to make the regulations. Presently it is 13 percent understaffed with 266 people. The regulation and the work required to properly monitor this telco entry simply is not there.

Mr. SIMMONS. Senator, may I piggyback on that answer?

Senator BURNS. You bet.

Mr. SIMMONS. You raised the specter of big industry who is involved in newspapers and cable and television, and that is correct. My company is but not in the same town, Senator; not in the same district. The Congress of the United States and the FCC has determined that diversity of opinion is so important that structural barriers must be imposed.

What you are suggesting with respect to an industry, the telephone industry which has violated time and time and time again every rule and regulation which has been imposed upon it, that behavioral restrictions will be adequate. I am not sure I understand why.

Senator BURNS. Would it concern you, Mr. Simmons, if the conduit called cable was also a primary owner in the programming?

Mr. SIMMONS. If the owner of the conduit called cable was a telephone company, I would oppose it with my last breath.

Senator BURNS. Tell me the difference where you have a cable company that has an interest in CNN or Turner Broadcasting or whatever where we have seen that the industry has significant horizontal and vertical integration.

Mr. SIMMONS. Senator, I used to be a lawyer before I went straight. To the extent that vertical integration in the cable industry is a subject that concerns you—and I know that it has been the subject of considerable testimony—deal with it.

The last time I looked, there still were antitrust provisions. It has been commented here that sometimes that takes too long. Fine. In the House bill there is a bad actor provision, and I would suggest you direct that bad actor provision right at the people who you

feel are violating the rules. To substitute one enormous integrated company for a few bad actors is a terrible mistake, Senator.

Senator BURNS. Right now the provisions of this legislation require "must carry/no pay" for broadcasters, protect you in that respect, and also requires anybody else wishing to enter to have 75 percent of their capacity allocated on a common carrier basis. I want to ask you, is that not enough protection?

Mr. SIMMONS. No, sir. No, sir. There is a cable system in Fairfax that has over 100 channels.

Senator BURNS. Yes.

Mr. SIMMONS. If you give 25 of those channels to the telephone company who, with the muscle that they have, can buy up all the programming, no, that is not sufficient at all.

Senator BURNS. They cannot get the demand on 25 channels if they have a "must carry". That also includes———

Mr. SIMMONS. You get 80 to 90 percent of the viewers.

At one point the Congress of the United States was very concerned that the three networks might have as many, if I remember the figures, as 75 to 80 percent of the viewers. If you give the telephone company the authority with its muscle to program 25 percent of the channels in Fairfax County, you are going to have 90 to 95 percent of the viewers.

Senator BURNS. But you still have access to the rest of those channels.

Mr. SIMMONS. You have access, Senator, but do you have a viable business?

Senator BURNS. I do not know. Do the software producers have an adequate business with the cable people now with the ownership as it is?

Mr. SIMMONS. You are talking about an industry which is still split. There is still competition, Senator, and there is going to be increasing competition from wireless and DBS, not to mention over-the-air signals. If you let the telephone company in, you are going to end up with one.

Senator BURNS. Keeping in mind that this has nothing to do with the RBOCs. These are the independents.

Mr. SIMMONS. Yes, sir, but if that be true, why is the back of this room full with representatives from the RBOCs?

Senator BURNS. I have no idea. Maybe they have nothing to do on Tuesday afternoon. Men's day at the club is usually on Thursday.

Mr. SIMMONS. They will be coming, Senator. They will be coming. GTE alone is bigger than the entire cable industry.

Senator BURNS. I do not think that this Congress is willing to take a look, and we have also said that this legislation by no means has anything to do with MFJ or the consent order, especially on that sort of a condition.

Right now, we are in a position where if we are going to talk about cross-ownership and rules and regulations—if they can set down the rules for broadcast, they can sure administer the rules to independent telcos on what they can and cannot do—they I think it becomes a fairness issue.

I know I am aware of what free broadcast does. I am a great proponent of it. In fact, I will say that you ought not do anything for

nothing. Nonetheless, I think the safeguards are there, and they can be administered, and either competition or the threat of competition and the marketplace as a rule are the best regulators.

I know if you are in the broadcasting business and the publishing business and the cable business that there are three different sets of books. It is required of you. I think, personally, the same thing can be done now with a known product that is already on the books.

Mr. SIMMONS. We have only one set of books, Senator, and those are the books that we report to our stockholders, as do the telephone companies even with their separate subsidiaries.

Senator BURNS. Yes, but you still have some separate subsidiaries and you keep another set of books.

Mr. CHAPMAN. Senator Burns, you asked the question of me if we would prefer to pay and have "must carry" or indeed simply pay for the conduit. LIN Broadcasting and I believe most broadcasters out there believe that they would rather pay on the same terms and conditions as other users than have to have, say, free carriage but then have the telcos in the content business, simply put.

Senator BURNS. Thank you very much.

Senator INOUYE. Thank you very much. Two years ago, Chairman Sikes suggested the video dial tone. Do you have any thoughts on that?

Mr. CHAPMAN. Mr. Chairman, I believe that the video dial tone was certainly a position that we believed in. We do not believe, however, as you have heard me say in the content aspect of the person that owns the conduit being in the programming, or content, business—and I think if we were to revisit 1984 and the Cable Act, this Congress would agree—that cable should have been a common carrier also.

For those reasons, we believe that as long as the telephone companies stay in the business of common carrier, it would serve the American public well and also the broadcasting industry that provides all the news and public service to the communities that they presently do.

Senator INOUYE. As you heard, Mr. Sugrue, the Administration representative, stated that he was in favor of doing away with the cross-ownership prohibition as it applied to telephone and cable. I suppose a logical follow-up would be to do away with all cross-ownership prohibition. What would be the situation in the United States if cross-ownership prohibitions were taken away? I mean, at newspapers and radio and television and cable—the whole schmeer.

Mr. SWANSON. I would imagine, Senator, that there would be a great deal more competition in all those fields, but I would like to point out how that would apply strictly to the telephone industry, because it has been commented here today that if we are permitted into this business, by 1996 everybody else seated at this table will be out of the business.

I appreciate, Senator Burns, your pointing out the fact that not all of the people up here share my opinion, but I would like to say that the construction of a cable television system is a very long-term proposition. The part of the system we normally refer to as the head end that takes in the signals and so forth, that can be

done in short order, but the building of the distribution system, whether it is coax or fiber, takes a considerable time period.

If telcos had no prohibition whatsoever, and could start into the cable business tomorrow morning, in my opinion it would be years before they could build a viable cable system, and then, without any guarantee of any type of programming whatsoever, they would come into this market at a distinct disadvantage.

So it would be years before the telephone industry could be competitive, in my opinion, to the existing cable industry, which I should point out does exactly the things that they do not want us to do, and that is, control both the conduit and the content.

Mr. SIMMONS. I would like to respond to your question directly. If all cross-ownership restrictions were eliminated, you would end up, ultimately, with one voice, or very few voices. I think the essence of our democratic system is a diversity of voices which very frankly has in part been made possible by the structural impediments and barriers that Congress in its wisdom enacted many years ago.

If you take them all down, money will talk. The biggest will win out, and I do not want to lecture the United States Senate, but I think when that happens we will lose a very fundamental part of what democracy in this country is all about.

Senator INOUYE. Mr. Fishman, do you have any thoughts on that?

Mr. FISHMAN. The tearing down of the barriers, I would agree with Dick about that, that tearing down the barriers of cross-ownership—our company owns no cable. We own no TV. But I think the real issue here, Senator Burns and Mr. Chairman, is simply this. You see—and I do not want to down-grade these folks. They do a beautiful job. "The Washington Post," and Gannett, and Scripps-Howard, those folks, they are big folks, and they have got big lawyers and they can do big things.

But you see, out there in rural America, Senator, where you are trying to get this knowledge and where you are trying to get this information, if somebody steps on my toes—and I represent 5,000 small community newspapers in very small towns, for the most part. The total staff is the editor, and he sets the type sometimes, and he sells ads sometimes, and I have got a good friend in Livingston, Tennessee, he delivers the papers in his pick-up truck.

If you let the telephone company in his community into the business, where they can be both the one that is going to deliver it and the one that is going to do the programming, Richard Lyons is going out of business, because he does not have time, no money, and no resources, to make sure that those safeguards are in place that you assure us that are there, Senator Burns, and that the FCC can do.

When the Committee did the cellular telephone business, you presumably had safeguards in there where rural America would be protected. It has not worked. The cities have cellular telephone service. Rural America does not have cellular service. It is practically impossible to police that, and the smaller you are in the towns of 5,000, 6,000 and 7,000 folks, those kinds of towns, they do not have the resources to protect themselves.

Maybe the big city papers do, and maybe they can fight it out, but that is the reason that we are so opposed at the National

Newspaper Association to the telephone companies being in the content business, because regardless of what safeguards you write in there, we have no protection. If they do it, we are in trouble.

Senator INOUYE. My logic may be misguided, but if we adopt this measure and permit telephone companies to get into the cable business, Mr. Hostetter, should we do the same thing for cable, let cable get into the telephone business as new entrants with no regulations?

Mr. HOSTETTER. Well, as the questioning of the Administration made absolutely clear, there is an irreconcilable tension between the thrust of S. 1880 and this current regulation, and I think the Congress in its wisdom has got to make a decision whether there are sufficient monopoly characteristics to cable that it should be a regulated industry as S. 1880 would propose, or whether a competitive model is more appropriate.

Certainly, if the telephone companies were to be allowed into the cable business, it would be grossly inequitable not to allow cable companies to enter the telephone business. If you jump-start that competition, I think you have to face the fact that has been stated often at this table, that you have very unequal combatants in this competition.

We are the fourth largest cable company in the United States. We are one-twentieth the size of U.S. West, the fourth largest telephone company in the United States. I mean, you are not putting two gladiators into the ring with equal muscle development. There is an order of magnitude difference, and I think earlier Congress in its wisdom has seen that the pluralism, the multiple voices in a community, is a policy that has served the United States well.

This was not a new concept with the 1984 Act. This was established FCC policy in the early 1970s. So I have to ask if, one, it is consistent with our First Amendment pluralistic views of control of information. These cross-ownership restrictions are things that have worked historically—and I would argue the United States today has the most advanced communication system in the world in part because of this diversity of ownership.

When there is talk here about the Bells getting up the learning curve by doing development overseas, I find it rather ironic that there is no talk there of building integrated broadband networks. When the telephone companies are entering the market in the U.K. or in Hong Kong, their model is separate telephone and coaxial systems—two redundant wires into the home.

I have yet to be convinced that the benefits that are allegedly to be derived from this integrated system outweigh the history and success of earlier communications policy. I am fundamentally of the view that the burden must be on the proponents here, USTA, to demonstrate that somehow the United States communication system is losing out because of this barrier. I frankly think it is working, and working well.

Senator INOUYE. At this stage, I would like to go into recess until 2:30 this afternoon.

Before we go into recess, I would like the record to show that the Committee did offer the proponents of this measure the opportunity of having as many witnesses as they wanted to speak in favor. So it may appear as though you have an imbalance here, but as my

good friend, Senator Burns, will agree, we did make this offer, did we not?

Senator BURNS. Oh, yes.

Senator INOUYE. So I do not want you to think that we packed this four against one. And so, with that, I thank all of you for being so patient. But we will be back at 2:30. And at that time we will call upon Mr. Hal Selander, Mr. Leland Johnson and Mr. David Reed, Mr. Robert Harris, and Mr. Ronald Binz.

[Whereupon, at 1:45 p.m., the Subcommittee adjourned for lunch, to reconvene at 2:30 p.m. this same day.]

Senator INOUYE. We will now resume our consideration of S. 2800. And at this time I would like to call upon Mr. Hal Selander of the Braxton Associates of Boston; Mr. Leland L. Johnson and Mr. David Reed of the Rand Corporation of Santa Monica; Mr. Robert J. Harris, Professor and Chair, Business and Public Policy, School of Business Administration, the University of California at Berkeley; and Mr. Ronald Binz, Director of the Office of Consumer Counsel, Department of Law, State of Colorado.

I thank you very much for your patience, and waiting until this afternoon. And now may I recognize Mr. Selander.

STATEMENT OF HAL SELANDER, BRAXTON ASSOCIATES

Mr. SELANDER. Thank you, Mr. Chairman.

The ability to move massive amounts of information inexpensively will prove invaluable in the coming information age. Fiber optics is the technology that will enable us to achieve this objective. Hence, its rate of deployment will have a significant impact on our national competitiveness.

On the basis of a study that I undertook for the Telecommunications Industry Association, I have concluded that fiber is stalled on the way to the home. A change in policy is needed to break the technology logjam.

Although there are a number of trials underway to demonstrate fiber technology to the home, these trials do not constitute significant deployment. With the exception of the GTE trial in Cerritos, California, they all involve only a couple of hundred homes. The obvious question then is why is not more significant deployment occurring? Many argue that deployment is slow to come simply because it costs too much to deploy fiber to the home. Cost surely is a factor, but cost alone does not provide a full explanation.

I have drawn my conclusion that fiber is stalled because some fiber systems, specifically those designed to provide existing telephone services, so-called narrowband systems, are indeed cost effective today. To demonstrate this point, let me read an excerpt from a filing made by Northern Telecom in its NTIA filing:

> With appropriate volume commitments, Northern Telecom could provide a fiber-based distribution plant for narrowband services using an active pedestal at no more than a 10 percent first-cost margin over copper, and in some residential areas, at parity with copper, depending on the specific network layout.

On the other hand, higher cost is inhibiting the deployment of broadband systems, that is, those systems designed for voice, data, and video on an integrated basis. But, again, cost is not the obstacle for narrowband systems.

I believe the reluctance of telephone companies to embrace narrowband systems is driven by an uncertainty over the outcome of the debate on telephone company entry into video programming. In light of the uncertainty about ever being able to provide video programming, it appears that telephone companies are taking a wait-and-see attitude with respect to narrowband fiber deployment.

I am convinced that if you create a competitive environment for video programming, you will see new technology deployed faster. My confidence in the competitive model is supported by our experience in long distance telephone service.

Although fiber technology was invented by Corning in 1970, and went into fiber trials soon thereafter, the first commercially significant order was not placed until 1983. That order was placed by MCI. And it is significant that a commitment to fiber technology was made only after the long distance market was transformed from a monopoly market to a competitive market.

The adoption of the Burns bill or other similar actions could break the technology logjam. It would give the telephone companies a clear path forward, and would probably result in the immediate deployment of narrowband fiber systems that can be upgraded to broadband sometime in the future—when the demand for new video services becomes more certain.

In this way, telephone companies can deploy the technology gradually, what they call a migration strategy.

Fiber optic system costs will decline dramatically as more systems are produced and deployed. For example, since optical fiber was first deployed, its price has fallen from $2 a meter to less than 10 cents a meter today. This is due to what is called the experience curve. And I found this phenomenon is universally recognized by experts in the field.

The experience curve effect also redefines the fiber cost issue. Other witnesses who have appeared before this Committee have said that it will cost $450 billion or more to wire the country with fiber. Such estimates are based on current costs and they do not reflect the substantial cost reduction that will occur. They also assume that the network will be converted to fiber all at once.

These are both faulty assumptions.

When you take into consideration the gradual deployment of fiber and the experience curve effect, the issue of cost then becomes: how much additional investment is required to move down the experience curve to the point where fiber systems cost the same as existing technology, the so-called crossover points. Once we reach this point, fiber will be deployed in the normal course of building the network at no additional cost relative to existing technology.

What fiber needs is a means to get over the hump.

When looked at from this perspective, the additional investment involved is no where close to the $450 billion. Actually, the investment depends on the system that is actually deployed. But for the most expensive narrowband fiber system that is upgradable to broadband, this additional cost is as little as $7 billion, or could be reduced all the way to zero, depending on the system you deploy.

I am not here as a policy witness, and I know these are difficult issues. But I believe the Burns bill gives us an opportunity to move

this technology forward. This is not to favor telco interests or cable interests, but to favor national interests over industry interests. I hope that the Committee will approve this bill and recommend it for expeditious enactment into law.

Thank you.

[The statement follows:]

Statement by Hal Selander
Before the
Senate Committee on Commerce, Science, and Transportation
Subcommittee on Communications

July 24, 1990

Mr. Chairman, thank you for the opportunity to appear before you today on behalf of the Telecommunications Industry Association to discuss with you what I believe is a very important issue -- that is, the rate at which fiber optic technology will be deployed into our Nation's telecommunications network. I believe this is an important issue because the ability for the United States to move massive amounts of information inexpensively from one point to another will prove invaluable in the coming Information Age. Fiber optics is the technology that will enable us to achieve this objective.

But I am not here to discuss with you why fiber optic technology is important to our national competitiveness. You and the other Members of this Committee understand national competitiveness issues better than I. And, I know you are all concerned about our long-run competitiveness and want to do everything possible to enhance it.

My purpose here today is to discuss with you some rather detailed economics that I was commissioned to examine for the Telecommunications Industry Association (TIA). As you know, TIA represents equipment manufacturers and suppliers, including almost all fiber optic equipment and component manufacturers in the United States. As such, TIA has watched the debate on the cable bill very closely with an eye toward assessing its impact on the deployment rate for fiber optics. Allegations have been made during this debate that the cost of residential fiber deployment is more than we can afford, some $450 billion. To fully assess these allegations, TIA asked me to examine the public literature on the cost of fiber to the home, and to offer my assessment regarding the prospects for the deployment of fiber based on those analyses.

Since completing my work, an excellent study was published by Rand, which includes an economic assessment for fiber to the home to provide video on demand. Some questions have been raised about the consistency of the conclusions in these two studies.

To assist the Committee in its deliberations, I intend to present my testimony in three parts. Part I includes a summary of the study that I did for TIA. Part II includes the policy conclusions that I've drawn from my analysis. In Part III, I will compare my conclusions with those made in the Rand study.

PART I: THE STUDY

The overall conclusion I drew in the study that I did for TIA is that the deployment of fiber systems may be "stalled on the way to the home." The higher cost of fiber systems does not in itself explain why telephone companies appear reluctant to take a strong stand in favor of deploying this technology. Some fiber systems for the provision of existing telephone services -- what technologists call narrowband services -- are cost effective today. Yet, they are not being deployed.

There is no denying that fiber systems all the way to the home for the provision of voice, data, and video -- what technologists call broadband systems -- are more expensive than existing technology. But the cost of these systems can be expected to decline dramatically once the deployment of fiber to the home for narrowband and broadband begins in earnest. This is due to the so-called experience curve effect, which results in the reduction of costs as production volume accumulates and innovation occurs.

Now I'd like to explain how I came to this conclusion. This involves:

(1) a description of the extent of fiber deployment to the home today;

(2) an explanation as to why deployment is not happening in any significant way; and

(3) a description of the outlook for future costs.

The Extent of Residential Fiber Deployment

I hope my conclusion does not mislead you into believing that equipment suppliers and telephone companies are ignoring fiber-to-the-home technology. They aren't. Numerous trials are underway nationwide. Some of them, particularly the GTE trial in Cerritos, California, are attracting a considerable amount of public attention. Exhibit 1 on the next page lists residential trials that are currently underway.

I would like to draw the Committee's attention to the third from the last column in Exhibit 1, which lists the number of homes involved in each of these trials. In reviewing these trials, I think it's important for the Committee to realize that they do not involve a significant number of homes. They represent an attempt by the telephone companies to try to further understand the technology, but they do not involve significant deployment.

Exhibit 1

DOMESTIC RESIDENTIAL FIBER TRIALS – EARLY 1990

Holding Co	Operating Company	Service Date	City, State	Location	Services	# Residences Now/Target*	Transmission Mode To Home**	Topology***
1986								
BellSouth Svcs	Southern Bell	Nov-86	S Orlando, FL	Hunter's Creek	Voice/TWP + CATV	210 now/251	TWP + MM(2)	Double Star/FTTH
1987								
None								
1988								
BellSouth Svcs	Southern Bell	Jun-88	N Orlando, FL	Heathrow	Voice, CATV, ISDN	256 now	SM(2)/Digital	Single Star/FTTH
Bell Atlantic	NJ Bell	Aug-88	S Brunswick, NJ	Princeton Gate	POTS only	45 now/104	SM(4 dual)/Digital	Double Star/FTTH
BellSouth Svcs	So Central Bell	Nov-88	Memphis, TN	Grove of Riveredge	POTS only	51 now/99	SM(1)	Double Star/FTTH
Contel	Contel Service	Dec-88	Ridgecrest, CA	Vista Del Cielo	Voice, CATV later	100 now/394	SM(1)/Digital	Double Star/FTTH
1989								
Bell Atlantic	Bell of Penn	Mar-89	SW of Pittsbg., PA	Perryopolis	Voice and CATV	66 now/92	SM(2) Anal/MM(2)	Single Star/FTTH
US West Comm	NW Bell	Jun-89	Mendota Hts, MN	Kensington	POTS only	97	SM/Digital	Double Star/FTTH
BellSouth Svcs	Southern Bell	Jul-89	Lake Norman, NC	Governor's Island	POTS only	42	SM(1)/Digital	Double Star/FTTH
BellSouth Svcs	Southern Bell	Sep-89	Savannah, GA	The Landings	POTS only	192 now/216	SM(1)/Digital	Double Star/FTTH
BellSouth Svcs	Southern Bell	Aug-89	S Orlando, FL	Hunter's Creek II	POTS only	117	SM(1)/Digital	Double Star/FTTH
BellSouth Svcs	Southern Bell	Jul-89	Miamai, FL	Coco Plum	POTS only	119 now/200	SM(1)/Digital	Double Star/FTTH
SW Bell	SW Bell Tel	Sep-89	Leawood, KA	Hallbrook Farms	POTS only	132	SM/TWP Hybrid	Double Star/FTTH
SW Bell	SW Bell Tel	Oct-89	Olathe, KA	Cedar Creek	POTS only	260	SM/Digital	Fiber to Curb/FATTH
Ameritech	Illinois Bell	Dec-89	NW of Chicago, IL	NW Suburbs	POTS only	300	SM(2)/Digital	Fiber to Ped/FATTH
SW Bell	SW Bell Tel	Dec-89	Ft Worth, TX	Mira Vista	Voice and CATV	80	SM(2)/Analog video	Double Star/FTTH
NYNEX	NE Tel/Raynet	Dec-89	N of Boston, MA	Lynnfield	POTS only	100	MM	Fiber to Curb/FATTH
1990								
BellSouth Svcs	Southern Bell	Mar-90	Charleston, SC	Lakeview Terrace	POTS only	100	SM(1)/Digital	Double Star/FTTH
BellSouth Svcs	Southern Bell	Mar-90	Charlotte, NC	Morrocroft	POTS only	96	SM(1)/Digital	Double Star/FTTH
Bell Atlantic	C&P Tel of Va	Apr-90	Near Wash, DC	Cascades	POTS/CATV later	126	Some SM(1)/Digital	Star FATTH & FTTH
BellSouth Svcs	Southern Bell	Jun-90	Atlanta area, GA	NA	NA	NA	NA	NA
BellSouth Svcs	Southern Bell	Jun-90	Columbia, SC	The Summit	POTS only	285	SM(1)/Digital	Double Star/FTTH
GTE Service Co	Gen'l Tel of CA	Jun-90	Cerritos, CA	Cerritos	Voice, CATV, other	705 1st/16000	Coax and SM/Digital	Mixed: Testbed
Contel	Contel of NY	Jun-90	Sidney, NY	Sidney, NY	POTS only	600	SM/Digital	Double Star/FTTH
United Tel	United Tel of FL	1990?	Ft Myers, FL	The Gateway	Voice and CATV	NA	Coax; fiber delayed	NA
US West Comm	Mountain Bell	1990	Scottsdale, AZ	Desert Hills	POTS only	102	SM/Digital	Double Star/FTTH

Sources: "Lightwave", "The Loop", ComForum, "Cable-Telco Report", Braxton analysis

* Planned expansions listed, if known
** SM = Single Mode Fiber; MM = Multimode; TWP = Copper Twisted Pair
*** FTTH = Fiber To The Home; FATTH = Fiber Almost To The Home
Completed Trials: Leawood

Why Isn't Deployment Happening?

The obvious question is: Why isn't more significant deployment occurring? Many argue that deployment is slow-to-come simply because it costs too much to deploy fiber to the home. Surely cost is a factor, but cost alone do not provide a full explanation. Something else is inhibiting investment in this technology.

To demonstrate this point most aptly, let me read an excerpt from a filing made by Northern Telecom before the National Telecommunications and Information Administration in its infrastructure docket. Northern said in its reply comments in May:

> "... with appropriate volume commitments, Northern Telecom could provide a fiber-based distribution plant for narrowband services using an Active Pedestal at no more than a 10 percent first cost margin over copper and in some residential areas at parity with copper depending on the specific network layout. Taking into consideration maintenance and administrative savings, a narrowband fiber network would meet or beat lifetime cost of a copper equivalent. (emphasis added)"

-It is my understanding that Northern Telecom is not the only company that has a cost-effective solution for fiber deployment. Other vendors make similar claims. If this is the case, why isn't deployment occurring? A closer examination of fiber system designs and related costs gives us some insight into the answer to this question. This type of cost analysis is exactly what I did for TIA in my study.

One conclusion I drew from my analysis -- again based the published work of others -- is that there is not one answer with respect to the cost of fiber systems. Like copper, which can range from $400 to $1,500 per subscriber, fiber to the home system costs vary with each neighborhood. These differences are expected. We would not expect the cost of wiring a townhouse in Manhattan to be the same as wiring a farm in Iowa. Costs are different because installation requirements are different.

In addition to these understandable differences, the differences in fiber system costs are driven by a definition of what we mean when we say "fiber to the home." Do we mean fiber to the neighborhood, with copper or coaxial cable in the final connection to the home? In some cases, these systems can be used cost-effectively today to provide current narrowband services for new builds. Or, do we mean fiber all the way to the home which would allow for the provision of all services (voice, data, and video) on one wire? These latter systems are very expensive. So, when we say "fiber to the home" we need to be clear on what we mean as it affects the cost calculation.

To be thorough, I examined the costs of all systems, including fiber optic systems that can be used for the provision of existing telephone services -- the so-called "narrowband systems" -- and systems for the provision of voice, data, and video on an integrated basis -- the so-called "broadband systems."

It is important to understand the costs of narrowband fiber systems because they allow for the fiber technology to be deployed gradually. This is called a migration strategy. It involves the deployment of fiber systems for existing telephone services in the short-term on the basis of cost, and the upgrading of these systems to broadband at some point in the future when the demand for integrated broadband services becomes more certain. Frankly, I think it is most likely that fiber technology will be deployed to the home by means of narrowband migration strategies.

As I said, the study examines the cost of both narrowband and broadband systems. First, with respect to narrowband systems, the cost estimates for 1990 in the public literature range from $1,100 to $3,750 per subscriber. These costs relate to the cost of copper, which ranges from $400 (primarily rehabs) to $1,500 (new builds) per subscriber. Why such a large range?

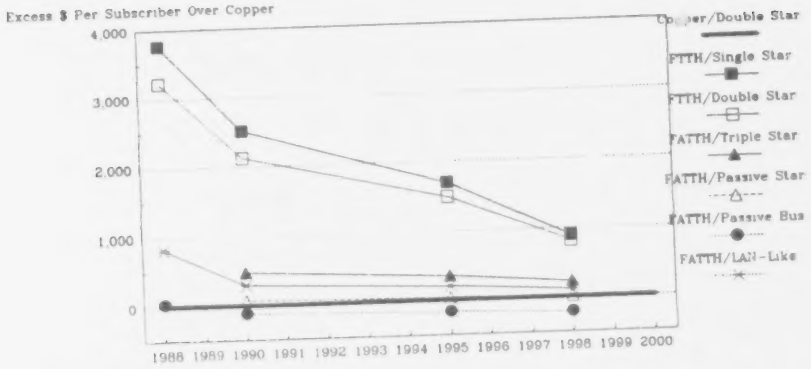
Exhibit 2 on the next page shows the difference in the cost of various narrowband fiber systems relative to the cost of copper. Not surprisingly, we see that differences in topology or design assumptions is the explanation behind the range of cost estimates.

Some of the narrowband fiber systems, particularly those that bring fiber all the way to the home, are more expensive than copper. But it's very important for the Committee to realize that the public literature confirms Northern Telecom's statement to NTIA that some narrowband fiber systems are cost-effective today. These systems do not bring fiber all the way to the home. Rather, they bring fiber into the residential neighborhood. I call these systems "fiber-almost-to-the-home" or FATTH.

Moreover, these cost-effective fiber-almost-to-the-home systems are designed to provide existing telephone service, not the range of new services for which fiber optics is uniquely suited. But, these systems provide a way to take an intermediate step into the future. They give telephone companies a means to initiate a migration strategy to deploy fiber for narrowband service first and to upgrade these systems to broadband sometime in the future.

As in the case of narrowband systems, the public literature on broadband fiber systems all the way to the home reflect a wide range of estimates: between $3,875 and $5,650 per subscriber in 1990. These estimates should be compared to the combined

Exhibit 2
NARROWBAND FIBER TOPOLOGIES VS. COPPER
Excess Installed First Costs



FATTH = Fiber Almost To The Home
1990 Copper Double Star $1250 per subscriber
Source: ElectroniCast, Braxton analysis

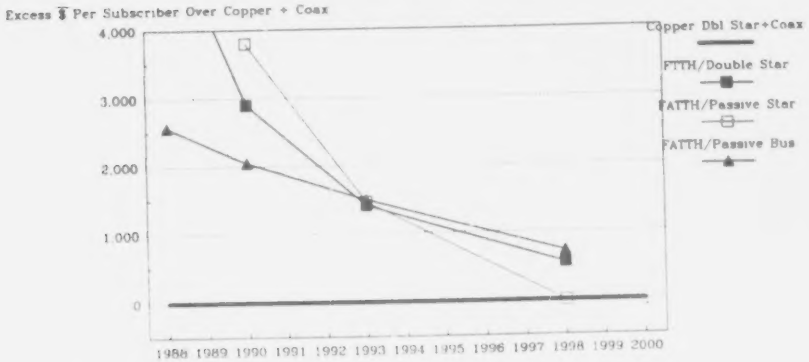
cost of copper for narrowband service and coaxial cable used by the cable television industry for one-way entertainment video service. The combined costs of these two technologies is approximately $1,850 per subscriber.

Again, I have tried to sort out these estimates in terms of various system designs. Exhibit 3 reflects the excess costs of broadband systems over the combined costs of copper wire and coaxial cable. As is readily apparent, the costs of these systems today are substantially greater than the combined costs of copper wire and coaxial cable. These numbers go a long way toward explaining why these systems are not being deployed today.

The conclusion that I drew from reviewing these cost estimates is that higher cost explains why *broadband* systems are not being deployed. But cost does not explain why the telephone companies are not deploying *narrowband* systems. Clearly, the economics suggest that telephone companies could deploy fiber today in new builds and in the replacement of deteriorated copper facilities. But I do not see anything in the marketplace that indicates telephone companies will be deploying fiber expeditiously.

I believe the reluctance of the telephone companies to embrace narrowband fiber systems at this point is driven by an uncertainty over the outcome of the debate on telephone company entry into video programming. Video is the only service that requires the substantial information-carrying capacity of fiber. Not having access to video blocks

Exhibit 3
BROADBAND FIBER TOPOLOGIES VS. COPPER + COAX
Excess Installed First Costs



1990 Copper Double Star $1250 per subscriber
1990 Coax Costs $600 per subscriber
Source ElectroniCast, Braxton analysis

migration strategies. In light of the uncertainty about ever being able to provide video programming, it appears that the telephone companies are taking a "wait and see" attitude with respect to the deployment of this technology.

Future Costs

As I indicated, the cost today of some fiber systems to the home are substantially higher than the cost of the existing technology.

The good news is that the cost of these more expensive fiber systems is expected to decline significantly as production volume accumulates due to the so-called experience curve effect. This phenomenon is widely recognized, particularly in high technology industries. It has been proven empirically that costs decline as production volume accumulates because efficiency increases with volume and because of innovation. This is particularly true in the case of optical fiber and opto-electronics.

Because of the experience curve effect, the price of optical fiber has declined from $2 a meter in 1980 to less than 10 cents a meter today. Similar cost reduction relative to volume has been observed in semiconductor-based technologies, including opto-

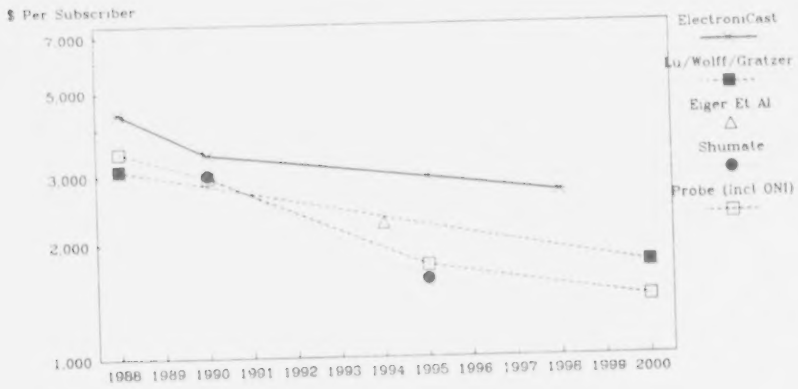
electronics. Generally, it is believed that opto-electronics is on a 70 percent experience curve. This means that costs decline by 30 percent with every doubling of accumulated production volume.

This experience curve effect is reflected in all the independent analyses that I reviewed for TIA. Exhibits 4 and 5 reflect the various estimates by technology experts of the cost of both narrowband and broadband fiber systems. These exhibit reflects my attempt to sort out different estimates in the public literature to come up with some numbers that are more manageable. Only the estimates for a full-capability "double star" design are included. These estimates all show the declining costs over time, and these costs are driven by accumulated production volume and innovation. I found that cost reduction arising from the experience curve is universally accepted by experts in fiber costs.

Exhibit 4

NARROWBAND COST FORECASTS -- DOUBLE STAR

Installed First Costs



Source Multiple secondary publications

A substantial portion of this cost reduction will occur in opto-electronics. Exhibit 6 reflects the expected cost reduction relative to volume of a whole range of opto-electronic components necessary to build fiber systems.

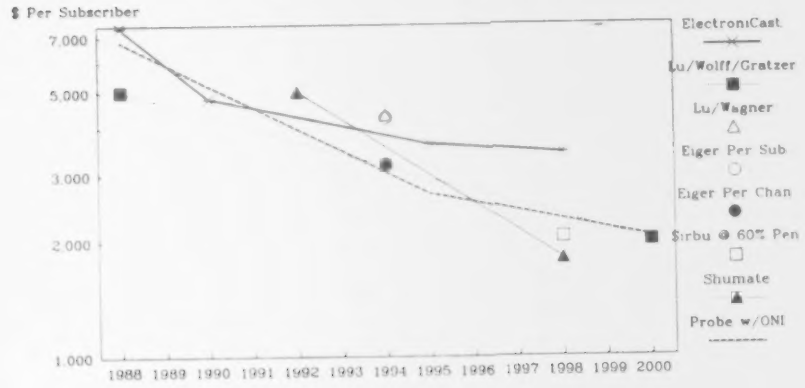
This cost reduction phenomenon is a critical factor in the debate over fiber to the home. It defines the essential question when it comes to costs. Witnesses before this

Committee have stated that it will cost $450 billion to wire the country with fiber. Such estimates are based on current costs -- these estimates do not reflect the substantial cost reduction that can be expected because of the experience curve effect.

Exhibit 5

BROADBAND COST FORECASTS -- DOUBLE STAR

Installed First Costs



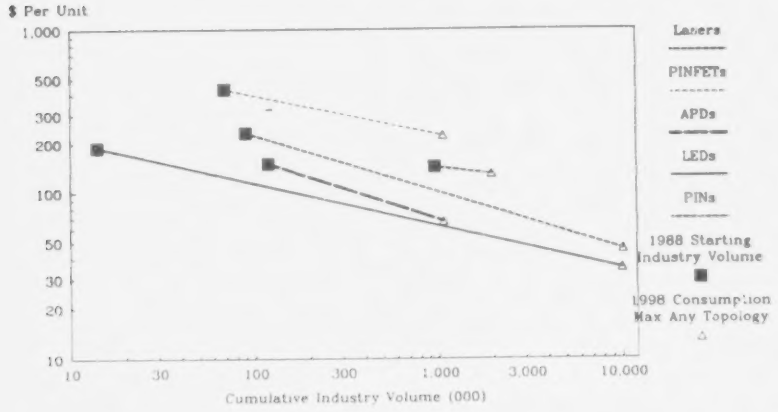
Source Multiple secondary publications

These witnesses also assume that our nation's telecommunications network would be converted to fiber all at once! This is a faulty assumption.

Fiber optic technology has migrated into our nation's telecommunications network. It started out in the early 1980's as the technology choice for high-traffic, long distance applications. It then migrated into connections between large switches. Now we find it moving closer to the neighborhood from large central switches to remote terminals serving neighborhoods.

This kind of migration can similarly be expected with respect to fiber to the home. Again, this would involve the deployment of narrowband fiber systems for voice service today that are upgradeable at some point in the future to broadband when the demand for new services is sufficient to justify the additional investment.

Exhibit 6
OPTOELECTRONIC COMPONENT EXPERIENCE CURVES
1988–1998 Unit Cost Vs. Volume



Source: ElectroniCast, Braxton analysis

So the cost issue is not how much it will cost to fiber the country. Rather, the issue is how much additional investment is associated with moving down the experience curve to the point where fiber systems cost the same as existing technology -- the cross-over point. Once we reach this point, fiber will be deployed in the normal course of building and maintaining the network.

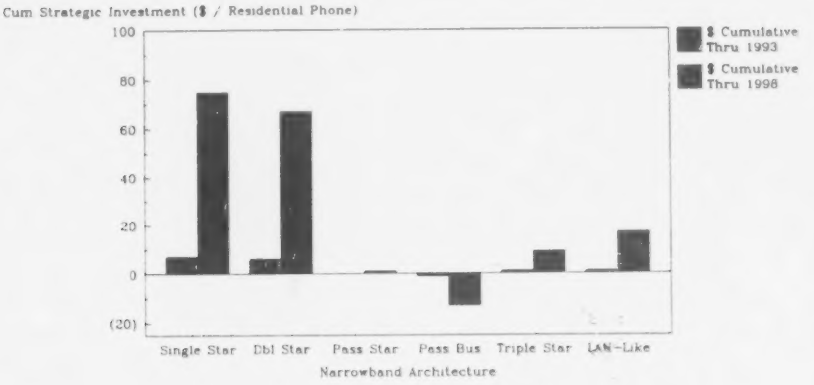
No one knows the size of this incremental investment precisely. It is difficult to estimate accurately because different system designs with different costs providing different services will be deployed in different situations.

Nevertheless, I have made some assumptions and generated some numbers for comparison sake. Those numbers for narrowband systems are reflected in Exhibit 7. What's interesting about these numbers is that they range from an additional incremental cost of zero for those narrowband fiber systems that are completely cost effective today -- to somewhere in the range of $60 to $80 per subscriber for systems that are not cost-effective today, but could be deployed in the anticipation of being easily upgraded to broadband in the future. These are the most expensive narrowband systems.

The costs for moving down the experience curve to the point where these more expensive narrowband systems are cost-effective with copper is only $7 billion. Once this

narrowband cross-over point is reached, the technology would be deployed in the normal course of business by network service providers as they expand, rebuild, and maintain their networks.

Exhibit 7
NARROWBAND STRATEGIC INVESTMENT
Excess Fiber Expenditures Over Copper



Source: ElectroniCast, Braxton analysis

I did not estimate the cost of moving down the experience curve for broadband fiber systems, although it's safe to say that the cost is more than $7 billion. But it is certainly not in the hundreds of billions of dollars as expressed to the Committee by others. Actually this number does not really matter. Broadband fiber systems will only be deployed if demand for network-based video services appears sufficient to justify their investment and if network services providers are allowed to provide such services.

PART II: POLICY CONCLUSIONS

My examination of fiber system costs leads me to the conclusion that fiber is stalled on the way to the home. This is not to say fiber won't eventually be deployed. It will. But, under current regulatory and legal prohibitions on video programming, the deployment is likely to be slow, uneven and skewed demographically and geographically.

This view is reflected in the comments by Bell Atlantic before the House Energy and Commerce Subcommittee on Telecommunications last April. At that time, Bell Atlantic stated that, if the prohibition on telephone company provision of video programming were lifted, Bell Atlantic would double its rate of fiber deployment.

The public policy issue then is whether the fact that fiber is stalled on the way to the home poses a problem of national concern. I think this is a matter of personal judgement. In my opinion, the slow rate of fiber deployment is a problem because fiber optics provides essential infrastructure for the Information Age. I think the best reflection of this is the fact that our principal worldwide competitor, Japan, is aggressively deploying this technology with the objective of completing deployment to the businesses by 1995 and to the home by 2015. The Japanese boldly say in their literature that fiber optics is the "bullet train" of the Information Age.

Let us assume for the purposes of analysis that the Committee agrees that we have a public policy problem with the slow rate of fiber deployment. Before we can fix this problem, it seems to me we have to understand what is causing it. From what I have examined in my work, I am convinced that uncertainty over the prospects for telephone company provision of video programming is a major reason why telephone companies are taking a "wait and see" attitude with respect to this technology. They simply need an additional incentive in order to take a risk with this new technology, even if the cost is equal to the cost of copper. Otherwise, telephone company shareholders will insist that excess cash be invested outside of their franchise and perhaps outside this country. This is not necessarily in our country's best interest, even if this makes business sense for the telcos.

The good news is that the solution to this problem does not involve a significant government expenditure. It may simply involve the introduction of competition in the provision of video programming. By doing so, the government will let the market decide how fast fiber or other technologies will be deployed.

I am convinced that if you can create a competitive environment for video programming, you'll see new technology deployed faster. This would give the telephone companies a clear path forward -- a migration strategy. With the incentive of being able to earn revenue from video programming, they would immediately begin deploying upgradeable narrowband fiber systems, and at some point in the future upgrade these systems to broadband when the demand for new services becomes more attractive.

My confidence in the competitive model is driven by experience in long distance telephone service. Fiber optics was faced with a competitive challenge in the long distance segment of the network back in the 1970's. Although the technology was invented by Corning in 1970, the first commercially significant order was not placed until 1983.

That order was placed by MCI for the use of fiber optic cable in its long distance network. It's significant that a commitment to the technology was made only after the long distance market was transformed from a monopoly market to a competitive market.

To be sure, there are many other public policy issues associated with the introduction of competition into video programming. For one thing, regulators have to ensure that the competition is fundamentally fair -- that is, no cross-subsidies from regulated businesses toward unregulated businesses can be allowed.

I did not address specific public policy issues in my study. I understand how difficult they are. The solutions aren't easy. But the question we have before us is whether or not we should try to resolve these public policy problems. I believe that we should because failure to do so may have an adverse long-term impact on our ability to compete in the next century.

PART III: THE RAND STUDY

Though the Rand study and my study use very different methodologies to assess the economics of fiber to the home, the studies are not internally inconsistent. Both agree, for example, that today integrated broadband fiber systems to the home are substantially more expensive than the combined cost of copper for telephone service and coaxial cable for video service.

Rand has generated a whole new set of economic assessments. I was not so creative. I just reported the views of other technology experts in my study. In fact, some prior work of one of the Rand co-authors is included in my technology summary.

Rand goes further to state that there's not sufficient revenue in video on demand to pay for the higher cost of an integrated broadband fiber system to the home. I did not address that service specifically. What I said, is that there needs to be additional revenue from multiple video services to pay for the higher installed first cost of fiber systems. Moreover, I indicated that a clear path to video services is necessary in order to give the telephone companies an incentive to deploy narrowband fiber systems today for voice service and to adopt a migration strategy for ultimate upgrading to broadband in the future. I see no disagreement between the two studies on these points.

I discussed in my study the effect of the experience curve in reducing the cost of fiber systems in the future. Rand didn't specifically examine the experience curve, but did reflect declining costs in its estimates. Moreover, Rand stated boldly that its analysis did not reflect cost reduction that could result from unanticipated R & D breakthroughs.

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These kinds of breakthroughs are precisely what drives experience curve cost reduction. Costs fall as production volume builds and as innovation occurs. Again, I do not see inconsistency between the studies on this point. Rather, the differences are degrees of emphasis.

Rand examines the question of cross-subsidies and other public policy issues associated with the deployment of fiber systems. For example, Rand states that the cross-subsidies are not a problem because they would be easily detected by regulators. I did not address the issue, but I have confidence that state regulators will not let cross-subsidies occur.

Finally, Rand concludes that allowing telephone companies into video programming would not result in increased competition for cable because telco costs would be too high. I disagree. I believe that competition would evolve over the long run and that telcos could be effective competitors in selected situations. This could lead to greater programming availability and could provide a check on escalating cable television prices as well.

But if Rand is right, why not remove the video restriction? It's unnecessary. And Rand indicates that the threat of cross-subsidies is not a problem. In short, if you accept Rand's analysis, there's no need for the video programming prohibition on telcos.

CONCLUSIONS

In conclusion, I would like to once again thank the Committee for an opportunity to present my views. I hope the Committee shares my concern for evidence that fiber is stalled on the way to the home. I hope the Committee will act urgently and decisively to approve the Burns amendment to clear up the uncertainty that is undermining telephone company incentive to invest in fiber optic technology.

Senator INOUYE. Thank you, Mr. Selander.
May I now call upon Mr. Johnson.

STATEMENT OF LELAND L. JOHNSON, THE RAND CORP.

Mr. JOHNSON. Thank you very much, Mr. Chairman, and members of the Committee.

I appreciate the opportunity to meet with you today to discuss the results of our recent study at Rand—a study that I coauthored with David Reed. Basically, we asked what would likely be the consequences of removing the ban on telco entry. We find that, there would likely be no dual-market competition, because telephone companies would not compete head-on with cable companies. Moreover, it is likely that there would be no new services would not emerge.

The reason for this outcome is that the demand we see for so-called switched video will be weak, given the relatively high cost we estimate for that service. And that conclusion is critical because on-demand video is the only new residential service that we can foresee telephone companies providing with fiber.

Without switched video service, telcos will provide essentially the same kinds of services as cable companies. Moreover, we will have, during the 1990s, two networks. One will be the narrowband telephone network with which we are familiar; the other will be a broadband cable television network, also with which we are familiar. In both cases, these networks will include much more fiber, as both networks are upgraded.

As you know, telephone companies are now putting fiber into their feeders and trunks, and cable operators are starting to install fiber in their trunk lines as well, for the straightforward reason that this improves service, reduce maintenance cost, and is generally more economic than a pure copper system.

These two networks will be owned either separately, as they are today, or one entity will own both. In fact, it is quite likely that with elimination of the ban there will be strong pressure for mergers—either telephone companies buying out cable companies, or cable companies buying out local telephone companies. In any event, the outcome will involve a single monopoly broadband line into the home.

Why is it that our cost estimates are high? We have examined the various components of integrated broadband networks and various components of what we call hybrid narrowband and hybrid broadband networks—that is, cable television systems that have fiber in the trunks, and telephone systems that have a good deal of fiber of the sort now being installed. We find that the combined cost of the two hybrids is substantially lower than the cost of the IBN.

The reason for the high cost if the IBN does not arise because of the cost of fiber. If fiber were free our results would be essentially the same. What drives our results is the cost of the electronics. Today telephone companies put their fragile electronics in central locations where they can be easily protected and maintained. The telephone system, the network, is a relatively simple copper system, powered from the telephone office.

An IBN requires highly sophisticated electronics at the customers' locations, and with some kind of new emergency power backup. Imagine the problem with this integrated system at the customer's premises if there is a failure. Both television service and telephone service would be disrupted. One reason our costs are high is that to protect the reliability of basic telephone service relatively expensive components are required.

In other words, one has to upgrade the quality of the video portion to match the high quality that we are accustomed to for telephone service. And that is uneconomic.

Integration is a nice sounding word. It is the opposite of disintegration, and that is a bad sounding word. But there is no magic in integration. Whether integration makes sense is a matter of the facts at hand. We foresee that during the 1990s there will be continued development of two separate networks.

We cannot say on the basis of our evidence alone whether the ban should be eliminated. There are two factors on each side of the debate. In favor of eliminating of the ban is the argument—that has a good deal of merit—that this would promote research and development, and would perhaps lead to technological breakthroughs going beyond the substantial breakthroughs that we assume in the RAND report. Under that pressure, cable operators might cut prices and improve their services, because of their fear of the R&D effort on the part of the telephone companies.

There might also be some cost with a single entity constructing and maintaining the two separate networks.

On the other side are two important arguments. One is the possibility of the two entities in the market merging, leading to a single monopoly wire line. Of course, if there is no competition for video, one might ask what difference does it make. Our response is that we do see some competitive activities in non-video, where cable operators provide possibilities for bypass to long distance carriers, and can provide non-switched data and voice to large business users within the local market. These kinds of competitive alternatives would be foreclosed with a monopoly wire line.

Finally, we have the problem of cross-subsidization. We feel that this problem has been overblown. We conclude that adequate safeguards can be put in place to forestall the kinds of enormous cross subsidies that would be required for telephone companies to compete head-on with incumbent cable operators.

Nevertheless, possibilities of cross-subsidization need to be further assessed. So without coming to a specific nice "yes" or "no" answer, we emphasize that you are faced basically with two arguments on one side of the fence and two arguments on the other.

Thank you very much.

[The statement follows:]

STATEMENT OF LELAND L. JOHNSON[1]
JULY 24, 1990

David P. Reed, and I have recently completed a RAND study, *Residential Broadband Services by Telephone Companies? Technology, Economics, and Public Policy* (R-3609-MF/RL). We ask whether telephone and cable companies would engage in head-to-head competition during the 1990s if the crossownership ban and other legal restrictions on market entry were lifted. (We do not consider competition by other media, such as direct broadcast satellites, with cable).

We describe alternative networks that these firms might favor in light of the constraints imposed by technology, economics, and government regulation. We focus especially on the prospects for telephone companies to construct integrated broadband networks (IBNs) that would use high-capacity fiber optic links to combine voice, data,and video services as a substitute for separate narrowband copper telephone lines and broadband television cable. We draw from an intensive review of the technical literature in estimating network costs, where anticipated technological advances play a key role, and we show how the results of our analysis are affected by alternative assumptions where uncertainty is particularly great.

Our analysis suggests that lifting the restrictions on telephone company entry would lead neither to dual-network video competition nor to emergence of new services. Telephone and television services would

[1]Senior Economist, The RAND Corporation, Santa Monica, Calif. The views expressed here do not necessarily reflect the opinions or policies of the sponsors of RAND research.

continue to be offered on separate networks. The two networks would be owned either separately by telephone and cable companies as they are today, or one entity would own both.

These conclusions emerge largely because of the weak market we anticipate for switched, "on-demand" video a service that would permit user to be switched (in the same way that telephone calls are switched) on a one-to-one basis to selections from a multitude of program sources. Switched video contrasts with nonswitched or distributive video that cable companies offer today. The role of switched video is critical because it is the only new residential service that we can foresee telephone companies providing with fiber. In the absence of switched video, the telephone company would be in a situation similar to that of an outside cable operator who would face difficulties in entering a market against an incumbent operator because of the natural monopoly characteristics of the cable television industry.

We conclude that the market for switched video services is severely limited because of its high cost combined with competition from services already available on cable and video cassette recorders. Presumably, services already available on cable would be offered by the telephone company as well, either through an IBN or through a separate cable television network. That adding switched video services would not cover its additional cost is suggested by the fact that many of our cost estimates for switched video exceed the total--some $300 annually--that subscribers on average spend today for *all* cable television services.

Our estimated costs of an IBN are higher than the combined cost of separate narrowband and broadband networks that would offer the same services (except for switched video). Economies clearly exist in combining narrowband services such as switched voice and data, and in combining broadband services such as basic cable service and pay movie channels. However, economies appear not to exist in combining switched narrowband and nonswitched broadband services. Thus, our analysis suggests that if telephone companies enter the video market during the 1990s, they would save money by building cable television networks separate from their telephone networks (with coordinated construction and maintenance), rather than by constructing IBNs.

This situation is illustrated in Table 1 which displays our estimated costs of alternative model networks. The investment in an IBN, either with or without switched video, exceeds the combined cost of a cable television hybrid copper/fiber network and a narrowband copper/fiber switched telephone network ($936). The cost disparity arises because of the much greater need for electronic components in the IBNs. Some telephone companies are considering narrowband fiber-to-the-curb networks as a transition step toward broadband service. As shown in the last column, the cost of this network does not greatly exceed that of the narrowband hybrid. But subsequently upgrading to IBN broadband would involve a cost larger than that of a separate cable broadband hybrid (e.g. $1449-$679 compared to $368), even if all narrowband components could continue to be used.

Table 1

INVESTMENT COST OF ALTERNATIVE NETWORKS PER HOME PASSED
(IN DOLLARS)

	IBN Switched Video*	IBN No Switched Video**	Cable Television Hybrid**	Narrowband Hybrid	Narrowband Fiber to the Curb
Electronics	1311	1015	167	287	413
Nonelectronics	449	434	201	281	266
Total	1760	1449	368	568	679

*60 percent video penetration, 1.5 hours on-demand video per week per subscriber.
**60 percent video penetration.

The prospects for IBNs are further dimmed by the possible problems of maintaining the reliability of telephone service at today's high levels. Telephone companies have confined their most fragile electronics to centralized locations, while using a rather simple copper network to reach their customers. In contrast, IBNs require a large investment in sophisticated electronic equipment in remote locations close to customers' homes. Not only would decentralization add to maintenance costs but, with integration of facilities, the failure of this equipment could disrupt both telephone and television service.

Moreover, many of the technological advances that enhance fiber's attractiveness to telephone companies would also enhance its attractiveness to cable systems, which pass more than 80 percent of the nation's homes. Some cable operators are retrofitting fiber in their backbone trunk lines, thereby improving signal quality, expanding channel capacity, and cutting maintenance costs. This process of gradually introducing fiber favors the cable operator. The use of fiber

in trunk lines *immediately* improves video service to *all* downstream subscribers, since they are already attached to the cable network by broadband coaxial lines. But installation by the telephone company of fiber in its feeder lines does not, by itself, provide *any* video service to telephone subscribers because they are connected to the network only with narrowband copper lines. Thus, cable operators can progressively retrofit portions of their plant, simultaneously improving service quality, while telephone companies face a potentially expensive cut over to bring video to telephone subscribers. Without a strong demand for switched video, telephone companies may never be able to cover the costs of offering non-switched video in competition with cable systems.

Despite these handicaps, would telephone companies nevertheless be able to compete by using cross-subsidies from their monopoly telephone markets? We conclude not, under current regulatory procedures, because the amount of required subsidy would be large and easy for regulators to spot. The use of price cap regulation for telephone service may further reduce the threat of cross-subsidization. If cross-subsidies occur at all, they are more likely in new communities without existing telecommunications facilities, where even small subsidies might tip the balance in favor of the telephone company in a close race to enter the video market before a cable operator.

Despite the apparently bleak prospects for competition between telephone and cable television companies and for development of new services, we cannot recommend on the basis of this study alone whether restrictions on telephone company entry should be retained or abolished.

On the side of removing the restrictions are the possibilities that (a) telephone companies may take approaches to broadband fiber R&D different from those of cable operators, possibly leading to unanticipated technological breakthroughs that would improve the prospects for IBNs. Seeking to forestall such developments, cable operators would be under pressure to improve their services and cut prices. Moreover, cost savings might accrue from common ownership of separate telephone and cable television networks.

On the other side, common ownership could undesirably foreclose potential competition in nonvideo information markets, and problems posed by potential cross-subsidization of video services supplied by telephone companies must be further assessed.

Questions would also remain about appropriate public policy if a move from the status quo is warranted. Whether telephone companies should be permitted to program some or all channels, as cable operators are now allowed to do, or whether they should serve only as common carriers, raises issues of how program diversity and First Amendment protection would be affected. In this study we simply assume that the telephone companies would be given full leeway to pursue whatever activities are most lucrative to show that, even with total freedom in programming, telephone companies are unlikely to succeed in competing against existing cable operators. The effects on program diversity and First Amendment rights of alternative arrangements for program supply must await further study.

Undoubtedly, some will take issue with our findings. Using different assumptions and other inputs, they may estimate lower costs than ours for IBNs. If so, however, we would urge one note of caution. Alternatives to the IBN, such as hybrid narrowband and broadband networks shown in Table 1, also should be assessed in light of these *same* inputs. For it is the *differences* between network costs, not network costs themselves, that drive the results of our study.

Copies of our report are available from RAND's publication department, 1700 Main Street, P.O. Box 2138, Santa Monica CA 90406-2138, telephone (213) 393-0411 X6686.

Senator BURNS. Thank you.

We have Mr. Robert Harris, who is Professor and Chair of Business and Public Policy at the School of Business Administration, University of California at Berkeley.

Thank you for coming today, Mr. Harris.

STATEMENT OF ROBERT G. HARRIS, PROFESSOR AND CHAIR, BUSINESS AND PUBLIC POLICY, SCHOOL OF BUSINESS ADMINISTRATION, UNIVERSITY OF CALIFORNIA AT BERKELEY, BERKELEY, CA

Mr. HARRIS. Thank you, Senator Burns. Thank you for inviting me. This has been quite a lesson sitting through the hearing this morning. It is as bad as depicted in the cartoons.

Whenever we discuss telco or communication information services, people seem to fall within one of two schools. The one school I might call the "boom and zoom" school. If only we removed all the restriction on telephone companies, if only we freed up market forces, we would all wake up tomorrow morning and our competitiveness problems would be solved. Both trade and fiscal deficits presumably would be gone. Consumers would have almost an inconceivable array of choices at virtually free prices. That seems a little too good to be true.

On the other hand, we have the "doom and gloom" school. We are going to wake up tomorrow morning and there are going to be no more newspapers, there are going to be no more TV stations or radio stations, especially in rural areas. They will have been wiped from the face of the earth—all because we take a modest step to supposedly let independent telephone companies enter into the video programming and service delivery business. Now that surely can be nowhere near the truth, either.

This is a high stakes contest, but central to my remarks today is that the effects of this proposal for the better and for the worse, whichever your point of view, are not going to be felt tomorrow or the day after and, by and large, not next year or the year after. We are talking about a very long proposition here.

If that is true, then why shouldn't we all just pack up and go home and worry about something that does matter tomorrow. We cannot do that anymore. The world has changed. Other nations have recognized far sooner and far better than we that we are in a global economy and that competition among nations is going to replace the competition within and among domestic industries as the driver of economic growth and the welfare of a country's citizens.

When you talk to people about long run planning in the United States, even talking on the corporate side, that is maybe two or three years out. If you go to talk to the long run planning of Japanese companies, they are looking at a 50-year time horizon. The short run planners worry about the next five to ten years.

Now if we look at telecommunications in that context, I would argue that we have to adopt the perspective of telecommunications being a strategic industry, and as part of my written testimony today I have submitted a recently completed analysis comparing U.S. telecommunications policies, which are decidedly nonstrategic in character, very ad hoc, very shortsighted and very protectionist

of the status quo, with those of our leading industrial competitors in the global in the Pacific Rim and Western Europe.

Why is telecommunications a strategic industry? First and foremost because our international competitors have already made it so. The notion that we are competing now with bureaucratic backwaters of post-telegraph and or telephone administrations is completely out of date. Telecommunication is, in the leading countries of Europe and the Pacific Rim, at the very cutting edge of national economic strategies.

Efforts to accelerate research and development, innovation, infrastructure, investment and marketing of new services is proceeding at a far more rapid rate than in the United States. That is not to say they have caught up with us, much less passed us by. It is to say that they are moving at a faster rate, and if we do not act now they will soon enough.

Second, telecommunication services is strategic because the downstream benefits are not merely enormous, they are a matter of economic necessity. American firms in whatever industry—manufacturing, financial services, publishing, entertainment, natural resources, health and education—cannot compete in world markets if we do not have a state-of-the-art telecommunications system. Again, the question is not whether we have one today but whether we will have one five or ten years from now. The decisions you make today will have a lot to do with whether we have one in the future.

Third, telecommunications is strategic because not only users but nonusers benefit as well. The very premise of "universal service" is that there are positive spillovers from the development of a communications network. Not just the people on the system but the people who are not on the system benefit. If someone does not need enhanced information services, that same person may nevertheless benefit from not having to stand in line for an hour to get a driver's license because the Department of Motor Vehicles is using an enhanced information network to provide that service.

Moreover, telecommunications has the potential in the longer run for reducing negative externalities as well. A lot of the problems of congestion on urban highways and at airports, energy consumption and pollution could be moderated—not eliminated but ameliorated—with more rapid development of our telecommunications infrastructure.

Fourth—and really key to understanding what other nations have done and why—is the upstream benefits from the innovation and investment by the suppliers of telecommunications equipment, components, software and related services. Japan and Europe have realized that domestic investment in a telecommunications network provides a platform for stimulating the growth and development of their supplier industries.

That is why Japan is so anxious to beat us to the punch on the deployment of optical fiber. They understand that it will give the Japanese-based equipment manufacturers a head start so that other countries rush to play catchup and finally get around 10 or 15 years later to deploying fiber, Japanese manufacturers will be in an advantageous position.

As we have seen from consumer electronics, once a country has lost such a national strategic advantage, it is very difficult, if not impossible, to regain.

If these arguments have merit--and I suggest that their adoption by many of our leading competitor economies implies they do—what does that imply for the decision before you today? This is a very modest proposal. I was more than a little amused at what was being attributed to it this morning, that the Washington Post is going to get wiped out by telcos going into video delivery.

On the other hand, it is no panacea, either. It is not going to solve our Nation's competitiveness problem. It is not going to eliminate it. You are not going to wake up tomorrow and have no mail from irate cable customers because telcos are going to enter the market. It is going to take years for this to happen, and it is ultimately going to happen through lot of technological innovation and development beyond the current levels.

The benefits, though, I see are these. First, the increase not so much in actual but in potential competition is a very important factor in the marketplace. That ought to cause cable companies to make their markets a little less inviting by improving quality and lowering price.

Second, competition between both cable and telephone ought to induce innovation in both technologies. It is not just the telephone company technology. There is tremendous room for improvement, as Dr. Johnson's study has shown, in the cable TV network as well.

Third, even the possibility of revenues, if somewhat distant in the future, provides the kind of incentive and the source of revenues for beginning to pay for somewhat faster rates of optical fiber development than would otherwise occur. In the 21st Century we could no more globally compete for the copper telephone network than we could with two-lane roads or propeller-plane-sized airports.

We have talked about very big numbers for optical fiber here. Frankly, they pale in comparison to what this country has already well spent on its airport system and its highway system. In this case, we need not spend any public funds. We finally have a solution that does not increase the size of the Federal deficit.

Fourth, I think it is an important signal to policymakers and actors in the private sector both in the United States and abroad that we are beginning to take steps to improve our performance rather than pointing the finger at others. While we are committing internecine warfare at home and asking other nations to take steps to solve our problems, we are taking one small but potentially significant step in the right direction.

Thank you.

[The statement follows:]

TESTIMONY OF

Dr. Robert G. Harris
Associate Professor and Chair
Business and Public Policy Group
Walter A Haas Graduate School of Business

Mr. Chairman, Members of the Communications Subcommittee, Fellow Panelists:

Thank you for the opportunity to offer testimony on the "Communications Competitiveness and Infrastructure Modernization Act of 1990." I commend Senator Burns and his staff for their initiative in drafting the proposed legislation and Senators Hollings and Inouye for commencing these expeditious hearings.

There are many important factors to be weighed in considering this legislation, including the effects of telephone company entry on customers of video services, telephone ratepayers, cable TV companies and potential competitors in communications and information services. These are important issues, and on the whole, Senator Burns draft bill does a commendable job of balancing competing interests and legitimate consumer and competitor concerns.

As important as these issues are, though, I will direct my remarks to the broader context and perspective which I think is crucial to sound public policies toward communications and information services. The worst thing Congress can do is to act as if this and related policy decisions are merely intra-industry disputes among narrowly defined economic interests. Nothing could be further from the truth. If the slogans "competitiveness in global markets" and "improving U.S. productivity" are to gain real meaning, Congress must incorporate the long-run, dynamic implications of public policies in weighing their pros and cons.

Thorough consideration of the dynamic implications of public policies is most crucial when the industry in question has strategic importance for the U.S., i.e., an industry whose performance is essential for economic growth, improved productivity and global competitiveness. In the accompanying paper, I have explained the economic characteristics of a strategic industry; shown that, in the "Information Age," telecommunications is one of the most strategic of all industries; and examined the implications for U.S. telecommunications policies. In the remainder of my remarks today, I would like to summarize the paper and stress its relevance to the proposed legislation.

There are four main reasons why telecommunications services is a strategic industry:

Telecommunications is strategic first and foremost because our major international competitors have already made it so. Telecommunications is no longer a policy backwater of post, telegraph and telephone administrations; it has become, instead, the cutting edge of national strategies for international economic advantage. Leading Pacific Rim and European nations have acted, in the past few years, to accelerate research and development, innovation, infrastructure investment and the marketing of new communications and information services. While there are important differences among national policies, they have one element in common: each of our top competitor nations have acted to remove regulations and restrictions that inhibit or prohibit telephone companies from offering new services. They recognize, as should we, that the revenues from new services provide both the incentive and the means to invest in research and development, innovation and infrastructure investment.

Second, telecommunications services have strategic "downstream" benefits, as more and more industries depend on enhanced information and communications services to reduce production costs, improve service quality, and extend the geographic reach of services. Consumers increasingly turn to telecommunications for convenience and necessity, to deal with the complex demands of modern life. Other nations have elevated telecommunications to strategic importance because they recognize that state-of-the-art communications and information services are crucially important to both international competition in global markets (e.g., manufacturing, financial services, publishing, entertainment and natural resources) and increased productivity in domestic industries (e.g., health, education, public services). Today, and even more so in the future, a nation's ability to compete in world markets will depend upon information; hence the heightened importance of removing barriers to, and providing incentives for, innovation and investment in the telecommunications infrastructure.

Third, telecommunications is strategic because non-users benefit as well; in economic terms, telecommunications generates enormous "positive externalities" and reduces "negative externalities." Continuing innovation and growth of telecommunications stimulates economic development by increasing the quality and quantity, while decreasing the costs of information. These positive spillovers benefit users, because the value of the network increases with the number of users interconnected by it. Non-users benefit as well, through the spillover effects on local, regional and national economic development. Moreover, by reducing the need for transportation, telecommunications can

reduce congestion on urban highways and airports, lower energy consumption and its concomitant pollution.

Fourth, telecommunications services are strategic because of the "upstream" benefits from innovation and investment by the suppliers of equipment, components, software and related services. Japan and Europe have realized that telecommunications infrastructure investment provides a domestic "platform" for stimulating the growth and development of supplier industries. By committing to a rapid deployment of optical fiber at home, for example, Japanese policymakers are ensuring that Japanese companies will gain a competitive advantage abroad, as later adopters of optical technologies play "catch up." As we have seen from consumer electronics, a national strategic advantage, once lost, is difficult or impossible to regain.

If these arguments have merit, and the recent policy choices of our competitor nations says they do, what do they imply for telephone company entry into video programming and service delivery?

To be sure, this legislation is no panacea. It will not solve our nation's competitiveness problem, nor will not eliminate increasing rates and poor quality of service in cable TV. In does have the potential, though, if enacted in concert with other progressive telecommunications legislation and regulatory policies, to make an important contribution to improved performance. In combination with the bill's safeguards against cross-subsidization and anti-

competitive conduct, I see these as the main benefits of removing restrictions on telephone company entry into video programming and service delivery:

First, the increase in actual and potential video services competition will create an incentive for cable companies to lower prices, improve service quality and increase their responsiveness to customers' needs. There is no longer an economic justification for public policies that maintain the monopoly preserve of cable TV companies from competition.

Second, competition between cable and telephone companies will stimulate innovations in both technologies. We cannot know, now, where technology will lead us in the future. We do know that increasing incentives for, and removing obstructions to innovation, will help get us there sooner.

Third, the revenues from interactive video services will help provide the means and incentive for continued investment in the nation's telecommunications infrastructure. In the 21st century, we can no more compete globally with a copper telephone network than we could with two-lane roads or propeller aircraft-sized airports. While the expansion and modernization of the highway and airway systems required hundreds of billions of public funds, we need only provide incentives for private investment in telecommunications. Here is a solution that does not increase the size of the Federal deficit!

Fourth, timely action on this legislation will send a important signal to our national competitors and the American public that Congress is taking seriously its role improving the nation's economic performance, that we will not allow

internecine warfare among industry interests to deter us from achieving national goals.

One of the key reasons for our economic success in the post-war period was a telecommunications network far superior to others; it is critical that we regain and retain that source of competitive advantage. This legislation is an important step in that direction.

I would be happy to answer questions. Thank you.

Senator INOUYE. Thank you very much, Mr. Harris. Now may I call on the Director of the Office of Consumer Counsel, Department of Law, State of Colorado, Mr. Ronald Binz.

STATEMENT OF RONALD BINZ, DIRECTOR, OFFICE OF CONSUMER COUNSEL, DEPARTMENT OF LAW, STATE OF COLORADO

Mr. BINZ. Thank you, Senator Inouye. My name is Ron Binz and I direct an agency in Colorado whose job is to represent residential and small business consumers. In that role, I participate daily in litigation, negotiation and discussions with members of the telecommunications industry. I appreciate the opportunity of bringing that experience before the Committee to comment on this piece of legislation.

Although I am not able to support the approach taken in S. 2800, I very much appreciate the close look this Committee is giving that issue, and I hope that my testimony assists you in making your decision on it.

I read with considerable interest the floor statement of Senator Burns when this bill was introduced, and it contains some very laudable goals. I would like to just make about five points, the first one of which is a question of whether this bill will achieve the sorts of goals that Senator Burns has enunciated, at least in the fashion in which it seems we would all want those to be accomplished.

It is my opinion that unless the deployment of fiber optics in the local loop is heavily subsidized by basic telephone ratepayers, the Burns bill will not result in the deployment of fiber optics. That is more or less the same—I mean, more or less, I am agreeing with the Rand study but probably for different reasons.

I believe that local distribution of signals of that sort is very much a natural monopoly. The fact that you have not seen cable companies attacking other cable companies for cable television service is not a testament to the concentration of their industry so much as it is a testament to the fact that there is a local monopoly. Those costs are the kinds of costs you want to incur one time, not over and over as multiple providers come into the marketplace.

The second related point there is that without subsidies from telephone customers, I do not believe that parallel networks will be constructed, and I do not agree that the mere threat of competition from the telcos is going to act to keep cable prices in line.

In your remarks, Senator Burns, you note that competition, or even the threat of competition, can force cable operators toward lower rates. Well, in some markets, and under very textbook conditions you get what is known as contestable markets, in which prices are held in check because someone is afraid that someone else will enter the market.

The fact is that in this case, the telephone company is not going to be able to sneak up on a cable television company. Their intention to enter the market is going to be signaled by years of construction and literally billions of dollars of investment, and in most cases the incumbent cable company will have years in which to maintain prices at whatever level it chooses to.

Price cutting at that point would then make the ability of the telephone company to gain market share—it has initially zero market share—very difficult. Knowing that, the telephone company I do not believe is likely ever to make the decision to go head-to-head with cable in existing markets.

Finally, in the findings section of the bill there is a discussion that competition will ensure that video services and advanced communication services are made available to all areas of the country and to all consumers. I think the thrust there is that this will bring telecommunications technology of a cutting edge sort to rural areas.

I respectfully suggest that that is not going to be the outcome. Telephone service was brought to rural America by the twin policies of universal service which was codified in the 1934 Communications Act and also the Rural Electrification Act, which provided low-cost financing for telephone systems in rural areas. Telephone service was not brought to rural America by competition. In fact, just the opposite was the policy.

The link between rural telecommunications and rural economic development is now very clearly understood, Senator Burns, probably by westerners as well as anybody in this country, but I rather doubt that market forces of the kind envisioned in this approach is actually going to bring those benefits to rural America.

My second point of five that I would like to make is that the Information Age envisioned in the Burns bill has been compared to the construction of a highway system, and I think it is a very apt analogy for a lot of reasons, one of which is evidently the intention is to construct the public good, a network over which goods would flow.

What is required to get there in my view is a tax. If not literally a tax, then it will end up being an assessment on every telephone user in the country to finance this. This is a hugely expensive enterprise, and in my view Senate bill 2800 merely rolls the competitive dice to see if we get there.

I have a great concern that the telephone entry into cable is not going to produce the kind of integrated public good system that we all envision. If, however, the telcos do rebuild a network to compete with, among other sources of information, the cable television, I believe that will expose telephone consumers to the risk of sharply higher telephone rates for basic telephone service. Those higher rates will be driven by two types of cross-subsidies.

We have heard that word used quite a bit. I would distinguish between two types of cross-subsidies that are going to occur: first, what you might term hidden ones. The recent exposure of the Nynex subsidiary is what I would call a hidden cross-subsidy. It is hard to detect, but once it is detected it is fairly easy to root out.

The other kind, and probably the much larger type of cross-subsidy, is what you might call a direct cross-subsidy. No one is attempting to hide it. In fact, it is being asked for very explicitly. This happens when telephone companies come before their state regulators and ask the state regulators to accelerate depreciation rates so that they can move the old plant and equipment out and bring the new in.

Now, that may or may not be a laudable public policy goal. The fact is that in the case of telephone entry into cable, that story is going to be repeated over and over and over again before state commissions, and on a case-by-case basis, state commissions are going to have to decide whether this is the year to begin to approve the payment of fiber optic cable for basic service, or whether it is next year. Eventually that will have to happen. I believe that is the only route through which cable entry—excuse me, telephone entry into cable even could occur.

You have heard plenty of stories about swamped regulators. That is true. It is true at the state level. They are well-meaning. They are underfunded in general, but in particular I think we should not assume that state regulators will be able to resist either the pressure or the persuasion to include in rates paid for basic service the cost of products designed for other purposes, unneeded for basic telephone service.

I have some good news I think, Senator Burns, you would agree. You are a Montanan and in Colorado a lot of telephone network modernization, including fiber optic deployment and rural modernization, is occurring without the thrust that this bill suggests is needed.

In Colorado, 100 percent of the switching capacity will be digital by 1993. We are eliminating multi-party service, and through an agreement between my agency and U.S. West we have recently expanded the local calling areas available to every exchange in the State. It is not an exaggeration to say that the quality of local telephone service in Colorado will be equal as between rural areas and urban areas within a matter of about two years.

Whatever the Committee does, or whatever the Congress does on the entry of telephone companies into the cable television business, I would suggest that it is still going to be necessary to have rate regulation of both basic cable prices and basic local telephone prices. The kind of rivalry or competition or whatever else that will develop in my view will not be sufficient to keep either cable prices in line or local telephone service prices in line.

To summarize, if a single switch broad-band telephone network is a public policy goal, then we need to state it as such, examine the costs and take steps to fund that kind of proposal.

I would suggest that S. 2800 is sort of like the Burpee Seed catalog. You rarely get vegetables as nice looking as what is pictured on the cover. I am afraid that by taking the kind of approach we propose to take here with the telco entry into cable television, we are likely to be rolling the dice, and the outcome is far from predictable. I think one of the least likely outcomes is the kind of information network that I believe we all hope will evolve in this country.

To conclude, allowing telephone companies in the cable television business offers obvious consumer benefits, but it does open the door for abuse. Telephone companies will finance their entry into the television entertainment business by loading a lot of the costs onto their monopoly telephone ratepayers. Recent studies such as the Rand study show that the up side of telco entry is pretty limited. I believe that the down side—namely, higher telephone rates—is quite likely.

Telephone network modernization including fiber optic deployment is proceeding without this legislation. This should continue to occur on an economic basis and not stimulated artificially by subsidies from basic telephone rates.

Finally, I believe that we are kidding ourselves to think that we can solve monopoly pricing in the cable television business by letting another bigger monopoly into the same business.

Thank you for the opportunity you have given me, and I would be happy to answer any questions.

[The statement follows:]

Testimony of Ronald Joseph Binz

Director, Colorado Office of Consumer Counsel

July 24, 1990

Senator Inouye, members of the Subcommittee, my name is Ronald Binz. I am the director of the Colorado Office of Consumer Counsel, the division of the Colorado Attorney General's office which represents the interests of residential, small business and agricultural utility consumers before the state Public Utilities Commission. I am also a member of the National Association of State Utility Consumer Advocates (NASUCA) where I serve on the Executive Committee and the Telecommunications Committee.

As Colorado's utility consumer counsel, I participate daily in litigation, negotiation and discussions with the members of the telecommunications industry at the state level. I appreciate the opportunity to bring that experience before the Subcommittee and to comment on this important piece of legislation offered by Senator Burns. Although I am not able to support the approach taken in S. 2800, I commend the Subcommittee for the close examination given this issue. I hope that my testimony assists you in your decision on the bill and that I am able to convey the interests of consumers of basic telephone service.

THIS LEGISLATION WILL NOT ACHIEVE THE POLICY GOALS ANNOUNCED BY SENATOR BURNS.

A. Unless the deployment is subsidized by basic telephone ratepayers, the Burns Bill will not result in deployment of fiber optics to the home.

The proposal to spur telephone network modernization by enhancing competition between cable television companies and local exchange telephone companies is attractive. In most parts of the United States economy we rely on the competitive marketplace to determine the allocation of resources and the price and availability of services. However, there are limits to the effects of competition in markets which have characteristics of natural monopolies.

Both the local exchange telephone industry and the cable television industry, given current technologies, are natural monopolies. These industries exhibit substantial economies of scale and scope, have high capital investment requirements and significant barriers to entry. As a result, competitors don't naturally arise once an incumbent firm has become established serving a market. Nationally there are very few examples of pairs of competing cable television companies in a single market; competition for local exchange service is also infrequent and is usually limited to resale of services of the local exchange company.

Given these characteristics, what are the possibilities for competition between cable television companies and local exchange

companies? While both industries distribute information, their networks and network requirements are quite different. Telephone service is a switched service and employs a "star" network structure; it is transmitted over narrowband facilities including a combination of copper wire, coaxial cable, microwave transmission and fiber optic cable. On the other hand, cable television is rarely switched, is distributed using a "branch and tree" network architecture and requires broadband transmission media.

In order to compete with the core business of the other, these industries would have to rebuild their existing networks. My opinion is that, absent significant subsidization from monopoly telephone customers, telephone companies cannot justify the deployment of broadband facilities in the local loop. Stated another way, the cable television market has enough characteristics of a natural monopoly that it will not sustain multiple providers.

This conclusion is supported by two recently concluded studies: one by Leland Johnson and David P. Reed of the RAND corporation[1]; the other by Mark Cooper on behalf of AARP and the Consumer Federation of America[2]. The two studies take widely different approaches to

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[1]Johnson, Leland L. and Reed, David P., Residential Broadband Services by Telephone Companies? Technology, Economics, and Public Policy (Santa Monica, CA: The RAND Corporation, 1990).

[2]Cooper, Mark. Expanding the Information Age for the 1990's: A Pragmatic Consumer Analysis (Washington, DC: The American Association of Retired Persons and the Consumer Federation of America, 1990).

the question, RAND emphasizing network design and cost considerations, with Cooper concentrating on the relative costs of a "telephone company based" and "decentralized" information services delivery systems.

Both studies grapple with a central problem: the uncertain demand for switched video services. The RAND study identifies switched video as the only potentially new service offered by telephone companies who would enter the video market. The study concludes that the incremental cost of switched video will exceed the incremental revenues produced by the demand for the product. If switched video fails to be economic, the RAND study concludes that telephone companies would fall back to a lower-cost network design and enter only new cable television markets, finding incumbents in existing markets unassailable. Without strong demand for switched video, telephone companies, if they offer video programming at all, will likely maintain separate networks for switched and unswitched services. In other words, entry into cable television will not affect the decision of whether to deploy fiber optic transmission facilities into the telephone loop.

Cooper contrasts the high cost of broadband services provided by telephone companies with the lower cost alternatives already in place or which are emerging through the "decentralized" information services market now under development. His conclusion is that the telephone-company-based route and its deployment of fiber optic

capacity in the local loop is too expensive considering these alternatives.

In examining whether the announced goals of the legislation can be met, we should also examine claim that telephone company entry into cable television will benefit rural areas. The bill asserts in Sec. 2, FINDINGS, that

> ...competition will ensure that video services and advanced communications services are made available in all areas of the country and to all consumers.

For rural telecommunications just the opposite may be true.

Telephone service was brought to rural America by the twin policies of universal service, set out in the 1934 Communications Act, and the Rural Electrification Act which provided low-cost financing for telephone systems in rural areas. Telephone service was not brought to rural America through competition. The link between rural telecommunications service and rural economic development is now clearly understood; the continued advancement of rural telecommunications should be a national policy goal. Market forces alone will not bring about the desired result.

B. Without subsidies from telephone customers, local exchange companies will not construct parallel networks in areas served by cable. Mere threat of competition in cable television from telephone companies is not sufficient to control cable rates.

In his remarks delivered on the floor of the Senate when the bill was introduced, Senator Burns stated:

> Competition (or even the threat of competition) can force cable operators to lower rates. In fact, this has been the result in those few instances where competing firms have "overbuilt" incumbent cable systems.

In some markets (and under textbook assumptions) the threat of competitive entry can be as effective as actual entry in controlling prices. A major requirement for a market to be "contestable" is that the threat of entry is real: potential competitors must be able to enter and exit a market relatively quickly and easily. These prerequisite conditions do not exist in the situation of telephone company entry into cable television.

A telephone company cannot sneak up on a cable television company. The telephone company's decision to enter the cable television business in its own service area will be signalled far in advance. In most cases, the entire distribution network of a local exchange telephone company would have to be rebuilt, requiring at least several years.

An incumbent cable operator would not have to lower prices until after the telephone company had committed, i.e., until the

telephone company had built the system. Price cutting at that time would benefit the consumer but would also ensure that the competing telephone company (with zero initial market share) would have great difficulty gaining a viable market share. Knowing this, the telephone company is unlikely to build in the first place, unless the enterprise was funded by other (telephone) revenues.

THE INFORMATION AGE ENVISIONED IN THE BURNS BILL WILL REQUIRE A TAX. IF THE TAX IS NOT STATED EXPLICITLY, IT WILL BE IMPLIED AS AN ASSESSMENT ON ALL TELEPHONE USERS.

This legislation evidently envisions the evolution of an integrated digital fiber optic switched network handling voice, data and video on demand. In his statement upon introduction, Senator Burns lists two-way interactive video, high definition television (HDTV) and two-way switched broadband systems as illustrations of what might result from the entry of telephone companies in the cable television markets.

There is considerable doubt that an integrated switched broadband network will follow from continued cable deregulation combined with telephone entry into cable television. Quoting from the findings of the RAND study:

> Thus, the outcome of abolishing all legal restrictions to the entry of the telephone company into the delivery of video signals would be to give it control over both a cable TV network and a (separate) narrowband network with essentially the same services as those available today.
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> Our analysis suggests that, if given the freedom, the telephone company would offer essentially the same video services as those available today. It would likely not offer switched on-demand service because the incremental revenues from the service would probably not cover the incremental costs. Nor would it be in society's interest for the company to offer on-demand service unless a persuasive argument could be made that subsidization of this particular service by other telecommunications services would, on balance, benefit society. (p. 28)

Assuming that a local telephone company is able to install such facilities (cross-subsidized or not), there would be no room left for another provider of those services in the same market. In other words, the goal of a switched broadband network necessarily conflicts with the goal of competition between networks.

If a single switched broadband network is a public policy goal, we should state it as such, examine the costs and take steps to fund such a project. The approach in S. 2800 is to roll the competitive dice and see what happens.

It is not always possible to predict the effects of deregulation of markets which contain economic barriers to full competition. For example, the creation of a hub and spoke architecture, geographic price deaveraging, price discrimination and mergers are all results, many negative, of airline deregulation. We can expect similar surprises when telephone companies are allowed to enter the cable television market.

S. 2800 WILL EXPOSE TELEPHONE CONSUMERS TO THE RISK OF HIGHER TELEPHONE RATES. THESE HIGHER RATES WILL BE DRIVEN BY TWO TYPES OF CROSS-SUBSIDIES: HIDDEN CROSS SUBSIDIES AND DIRECT CROSS SUBSIDIES.

One well-founded consumer concern about telephone company entry into cable television relates to cross-subsidization. S. 2800 attempts to allay that concern by including language prohibiting cross-subsidies. However, the bill actually adds nothing to the authority of either federal or state regulators. Moreover, the legislative intent set out in the FINDINGS section of the bill gives new impetus to the worry about cross-subsidization.

It is instructive to examine the original Burns amendments drafted for the cable reregulation bill. Although the language has been dropped from S. 2800, the original amendments contained explicit language which would have accelerated depreciation rates for existing telephone plant. The inevitable outcome of those provisions would have been to raise phone rates for basic service as existing plant was retired prematurely. The fact that the language has been dropped will not protect basic phone rates -- in fact, the Burns bill relies on such accelerated removal of the facilities in use today. In my view, few of the bill's goals could be met without such a shift of costs to basic telephone rates.

There has been much discussion about the ability of monopoly local exchange telephone companies to engage in cross-subsidization.

Amid much confusion on the subject, I suggest that there are two kinds of cross-subsidies: hidden and direct. Hidden cross-subsidies are hard to detect but easy to challenge. On the other hand, direct cross subsidies (which are probably larger) are easy to detect but hard to challenge.

If a telephone company pays an unregulated affiliate too much for materials or services like overhead and rent, this is a hidden cross-subsidy. It is detected (if at all) following an after-the-fact review by regulators. The cross-subsidy flows from regulated operations to the unregulated subsidiary and then to the parent company. Such subsidies permit the parent or unregulated subsidiary to earn profits beyond market levels by leveraging the market power of the monopoly company and by fooling the regulators. The recent case of the NYNEX purchasing subsidiary illustrates this sort of abuse. As another example, last week consumer advocates in five states in the Ameritech region called on regulators to review the allocation of certain costs to the telephone subsidiaries of Ameritech. The advocates claim that Ameritech improperly assigned millions of dollars in lobbying and advertising expenses to ratepayers, contrary to regulations in those states. While the detection of these hidden subsidies might prove difficult, they are easy to establish once detected.

Now suppose a telephone company charges basic telephone customers higher phone rates due to accelerated depreciation of copper wire

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loop plant. If the purpose of the rapid depreciation is to replace loop plant with fiber optic facilities, basic service is not improved, yet basic service customers are charged anyway. This is an example of a direct cross-subsidy. While this subsidy is obvious and straightforward, a variety of policy arguments are often advanced to justify the subsidy.

TELEPHONE NETWORK MODERNIZATION, INCLUDING FIBER OPTIC DEPLOYMENT AND RURAL MODERNIZATION, IS PROCEEDING WITHOUT THIS LEGISLATION.

Network modernization, especially rural modernization, is proceeding at a rapid pace in many states. In Colorado, the Public Utilities Commission recently approved three settlement agreements between U S West and the Office of Consumer Counsel.

* The Switch and Facilities Enhancement (SAFE) plan will lead to the upgrade of rural switches across the state from existing technologies to the latest digital technology.

* The Local Calling Area Plan (LCAP) dramatically expands the toll-free local calling area available to rural residents.

* The Rural Telephone Facilities Improvement Plan assures funding for a program to eliminate virtually all multi-party business and residential telephone access in the state.

The result of this activity in Colorado is that all rural consumers will have telephone service which is equivalent in quality to urban areas of the state by 1993. As Colorado's utility consumer advocate, I agreed to these upgrade plans, including the attendant rate increases, because I was convinced that the customers desired

the improved quality of service and would be willing to pay for such a tangible benefit. My belief was confirmed by market research conducted by U S West and by extensive public hearings conducted in Colorado by the Public Utilities Commission.

However, significantly, we did not agree to a U S West proposal to fund, through basic rates, the installation of network fiber optic capacity. In my view, this deployment was designed as a pre-emptive strike against future competitors, including cable television companies. U S West continues to install fiber optic capacity in trunking applications where existing cable or analog microwave links are inadequate or too costly to maintain. We should distinguish between this demand-driven, natural economic replacement of telephone facilities with the artificial stimulus for such an upgrade driven by a direct cross-subsidy from local telephone customers.

Finally, I would note that many of the regional Bell companies have proposed to upgrade basic exchange facilities as part of proposals to implement alternative forms of regulation in the states. Whether regulators should agree to these proposals depends on the specifics of each proposal; the important point is that network modernization is far from stalled in the states.

CONSUMER ADVOCATES OPPOSE THE PREMATURE AND UNECONOMIC REMOVAL OF TELEPHONE PLANT AND ITS REPLACEMENT BY BROADBAND FACILITIES.

Last month, the membership of the National Association of State Utility Consumer Advocates (NASUCA) adopted a resolution opposing the uneconomic and premature replacement of telephone plant and facilities. NASUCA consists of 44 members and affiliates in 38 states and the District of Columbia. As the following excerpt from the resolution shows, NASUCA members are very concerned about the effects which accelerated retirement and fiber deployment will have on basic telephone rates:

WHEREAS, upgrading the present telephone distribution plant to deploy fiber optic cable to individual subscriber premises is estimated to cost between $230 and $250 billion, doubling the gross value of invested local telephone assets; and

WHEREAS, replacing the existing switching technology with broadband switches is estimated to require between $40 and $50 billion of new investment; and

WHEREAS, the premature retirement of present plant and facilities and its early replacement with fiber optic cable and broadband facilities may be accompanied by more rapid depreciation rates and associated rate increases for basic telephone rates which could cost monopoly ratepayers billions of dollars in rates that are higher than required to provide basic local telephone service; and

WHEREAS, the deployment of fiber optic cable into the distribution network and the replacement of present switching technology with new generations of broadband switches may occur without premature deployment of fiber optics or broadband facilities and without subsidization by consumers through rates for basic exchange service...

THEREFORE BE IT RESOLVED that the National Association of State Utility Consumer Advocates (NASUCA) opposes the premature, uneconomic retirement of existing telephone facilities and the installation of fiber optics or

broadband facilities when such replacement will increase the rates for basic telephone service or cause the rates for basic telephone service to be higher than necessary; and

BE IT FURTHER RESOLVED, NASUCA opposes the assignment to basic telephone ratepayers of any of the higher costs associated with the premature deployment of broadband technologies; and NASUCA states that the only effects on basic telephone rates of deploying such facilities should be to lower the rates for basic service or cause the rates to be lower than they otherwise would be;...

THE HYBRID ARCHITECTURE OF THE INFORMATION AGE IS ALREADY BECOMING APPARENT. SWITCHED VIDEO ALREADY HAS NUMEROUS COMPETITORS. TOGETHER WITH THE FINDINGS OF THE RAND STUDY ON THE COST AND DEMAND FOR SWITCHED VIDEO SERVICES, THIS SHOWS THAT ONE-WIRE ARCHITECTURE IS LESS LIKELY AND MORE RISKY.

While S. 2800 speaks in terms of competition, the bill presumes a "centralized" information age structure. This follows because of the non-sustainability of multiple switched video suppliers in a single market.

In fact, the country is developing a hybrid decentralized structure: PC's in homes, many with modems, are gaining penetration; VCRs, video stores, CD ROMs, "downloading" video (e.g., Movie Channel Overnight), libraries lending videotapes, narrowband information services, are all examples of incumbent suppliers of information and entertainment services which will persist to compete with switched video services.

The lesson is that, without a stronger indication of a the future demand for centralized, one-wire switched video, someone is taking

a great risk by committing to such a model of the Information Age. Many consumer advocates are concerned that the risk will not be properly assigned and will manifest itself in the rates paid by all local exchange customers.

RATE REGULATION OF BOTH BASIC CABLE PRICES AND BASIC LOCAL TELEPHONE PRICES IS NECESSARY EVEN IF LIMITATIONS ON CROSS-OWNERSHIP ARE RELAXED.

The entry of local exchange companies into cable television programming and distribution will not provide sufficient competition to ensure reasonable prices for either basic telephone service or cable television service. The prospects for competition for switched local telephone service are bleak, especially if the local telephone company is also the cable provider. Unless we assume competing side-by-side networks for delivery of video services (which is most unlikely) telephone companies will become just another cable company after a franchise is awarded. Their costs are not likely to be much different than most cable companies and their incentives will be similar.

Until some other technology shows itself to be an effective competitor to cable television I endorse reregulation of basic cable rates. For similar reasons, there does not appear to be competition within the local loop to warrant deregulation of rates for local telephone service.

In closing, I respectfully recommend that the Congress not permit telephone companies to enter the cable television markets at the present time. As I hope I have demonstrated, the benefits of competition will not develop in this case and there are real risks of harm to the consumers of basic telephone service. Thank you for the opportunity to comment on this important piece of legislation.

Senator INOUYE. Thank you very much, Mr. Binz.

Senator Burns.

Senator BURNS. Thank you, Mr. Chairman.

The Rand study which was financed by the cable industry concludes that cross-subsidy is not a problem because cross-subsidy would be so vast that it would be easily detectable by regulators.

Would you want to elaborate on that, Mr. Johnson?

Mr. JOHNSON. Yes, but I do want to clarify the nature of the funding for this study. It was not financed by the cable television industry. On the inside front cover it says "supported by the Markle Foundation (a private foundation) and by Richard Leghorn". Richard Leghorn made a fortune in the cable industry, to be sure. But he does not represent the cable industry.

As a matter of fact, the reason he financed this study was that he is very interested in promoting program diversity. When he provided the funding for the study, he had in mind that we might conclude that a dual network system would be economically viable—that is, a cable system operating as it does today as a publisher—in other words, controlling programming—and a telco system operating as a common carrier.

We had to say after looking at the numbers that the dual-network outcome is unlikely and that we are not going to get two-network competition. Well, he was a bit disappointed in terms of his own view, because he is interested in possibilities that promote program diversity. We are now looking at direct broadcast satellites as another alternative to cable, and Mr. Leghorn—along with the Markle Foundation—is providing funding for that study as well.

Now to answer your question about cross-subsidization, we estimate that large amounts of money would be required in the form of a subsidy to finance the kinds of services on fiber that have been talked about. We cannot imagine State regulators being incapable of controlling those kinds of subsidies.

If telephone companies were to get into programming, those costs could be easily separated from regular telephone company costs.

The cross-subsidy problem does not worry us as much as some of the other problems—such as the buyout problem and how research and development should be effectively promoted.

Does that answer you question?

Senator BURNS. I think it does.

Would you indicate now on the buyout problem? In order to buy a cable company out, a telephone company—or we might turn that around and let the cable company buy the telephone company. You know, that works both ways—without the waiver from the FCC and, of course, with the local franchising authority having complete veto power, do you not think that is not safeguard enough?

Mr. JOHNSON. I do not think that is enough, because another provision suggests that if the two firms that want to merge can show that they are going to provide better service, that is an important criterion for the waiver from the FCC and for permission from the local authority. However, both telephone companies and cable operators today are improving their services, and they will continue to improve their service by the use of fiber in the trunklines—but not with fiber to the home necessarily because that is the part that seems to us uneconomic.

We will continue having coaxial cable and copper telephone lines to the home to provide all of the services we can think of for the future, except for switched video that we feel has a very uncertain market.

Senator BURNS. Mr. Harris, I will give you an opportunity to look into your crystal ball a little bit with regard to several subjects.

Regarding international competitiveness, you indicated that this is just a small step. We happen to believe that it would be wonderful if the government could be ahead of the curve in establishing some policy that is not really going to have a large effect on the industry until down the line when these new technologies come on line. We have to have something to spur it.

You might give us how you look at this down the line.

Mr. HARRIS. I want to make it clear that I do not have a crystal ball, and it is precisely because none of us do that I think it is so important to have policies that are technology neutral, that do not say, well, video programming has to go over what is now constituted by a cable TV company. They have one whole set of economic and technological incentives to go in one direction. The telephone company has quite different sets of incentives.

To even make the comparison, frankly, of the telco just giving us one more multi-channel cable TV company is to really totally miss the point. The cable system is a one-way, non-switched system, the cost of upgrading to two-way switched system would be far greater than the cost of adding optical fiber to the existing two-way switched network we have.

I do not see it as a matter of flipping channels between Robocop and the like. I see it as a matter of kids in Billings, Montana being able to literally dial up an engineering class at the University of Montana or an engineering class at MIT or Berkeley, for that matter. We are wiring our new Business School building. Every room is going to have video delivery capability, not just to bring the signals into the classroom but also to take the signals out of the classroom. Frankly, the way we are going right now, we are more likely to have students watching those lectures in Tokyo than we are in Billings, Montana.

As to should we have a comprehensive policy, would that be the better way to go, well, that is what Japan has done. That is what the U.K. has done. That is what France has done. That is what Germany is doing. We do not seem to be able to do that.

But if I am given a choice between taking the grand step, the all-encompassing, comprehensive, synoptic, long-run telecommunications policy—which will not happen and hence we do nothing, saying since we cannot do it the right way we will do nothing at all—we are left to taking as many small positive steps as we can. I see this legislation as one of those.

Senator BURNS. The consumer benefits?

Mr. HARRIS. I think the consumer benefits are going to be further down the line. They are not likely to be immediate. This just cannot have—the nature of the provision cannot have very much immediate effect. If they are, they will be rather small. But that is why the notions that the telcos are going to blow every other com-

munications and information services media out of the water seems a little ridiculous, frankly.

A big oak tree is where small acorns grow. This is a small acorn.

Senator EXON. Do you have any further questions, Senator Burns?

Senator BURNS. No, I was going to turn it over to you.

Senator EXON. Thank you, Senator Burns.

I would just like to say for the record that I am sorry I have been in and out today. We have a mark-up over in the budget committee that is taking an awful lot of time and effort. And I am very pleased to be back again this afternoon, after a rather disruptive day with lunches and so forth, and we apologize. You people have been patient.

Let me touch on a few things that I want to ask questions about. As I said in my opening statement this morning, I think this is a very complex bill and I am trying to make a determination on what is the best short- and long-term interests of the consumer. That is what we have to be very much concerned about. But for some of the questions that I am going to ask you are trying to get some input from you people that have obviously done a great deal more study on this whole proposition than most of us on the Committee.

We have not heard it mentioned today, but depreciation is something that has played into these discussions from time to time. And I do not know whether this is right or wrong, but I have at least heard that with the accelerated depreciation, generally, that we allowed the telephone industry a few years back, most of the telephone industry has pretty much used up their depreciation, and it was charged, at least, that they are now "looking around" for some additional capital investment construction to make sure that that depreciation can be accelerated to justify rates. And also, that this may be one of the reasons, it has been alleged, and I do not know whether it is true or not, that they are looking around to new fields of endeavor, a la their reentry into the cable business and allied fields.

Do any of the members of this panel have any information on that or any ideas?

Mr. HARRIS. Yes, Senator. There certainly may be instances of that. And of course the status of the depreciation reserves would vary widely from company to company, depending on what their investment cycle has been over time. But, as a general rule, because of a recent judicial overturn of a FCC decision which would have imposed economic rates of depreciation on the intrastate portion of telecommunications investment, the states challenged that on the grounds that under the Communications Act of 1934 the FCC did not have the authority to impose its chosen depreciation rates, however economically correct they might have been, the states had a right to choose themselves.

With a few exceptions, most states have deliberately chosen to stick with depreciation schedules that do not reflect the rate of technological change. You have a switch in place that will last 30 years, and so it is depreciated over 30 years. But that is like taking a PC and depreciating it over 10 years because it will last 10 years. If it is technologically obsolete sooner than that, then, as other

countries have done by speeding up the depreciation rates, you increase the flow of funds which provides the dollars for the investment in the next generation of technology.

Senator EXON. And I suspect that, as we have referred to time and time again in these hearings, there is a very rapid turnover in technology, almost a revolution I suppose, going on every month or so.

Mr. HARRIS. In basic computing power right now, you are getting a doubling every 12 to 18 months. That is the same technology trajectory that telecommunications is on.

Senator EXON. So another way of saying what you have just said, is that you do not put much weight, or justifiable weight, in the argument that the telephone companies are using this as an excuse for further investment that might not be needed?

Mr. HARRIS. No, I think there is an element of truth in your question, Senator, but I would put it a little differently. And this has both a negative and a positive side to it. I think what that means is if, as the depreciation rates were sped up, the cash flow, because depreciation is a non-cash expense to a business, it says, well, we just spent $10 million. We did not really spend it, we spent it a long time ago.

Now what are we going to do with this $10 million?

Well, you can give it back to your shareholders, or you can make it an investment.

One of the reasons telephone companies are interested——

Senator EXON. Well, you could reduce rates, could you not?

Mr. HARRIS. You could reduce rates, but you would essentially be giving money that belongs to the shareholder. In other words, they are the ones that originally put up the $10 million five or 10 years ago. You would be giving their money back to ratepayers.

So even a state regulatory agency would almost certainly not come to that conclusion. What they want to do, though, is by deferring the time at which that is treated as profit, that is, be lengthening depreciation rates, they push into the future the cost of providing telephone service to today's consumers is going to be paid by telephone consumers five years or 10 years down the line.

That has the effect of providing a disincentive for the replacement of existing technology with better ones.

Mr. BINZ. Senator Exon, if I may just add something.

Senator EXON. Yes.

Mr. BINZ. One of the things that Mr. Morris leaves out, though, is that much of the higher cost related to this accelerated depreciation is not placed on the services that are driving it, but instead on the basic ratepayer. That is the difficulty. That is how the subsidization happens. A switch is depreciated over shorter and shorter period of time not because it is incapable of providing telephone service, basic telephone service, but because it is incapable of providing some of the fancy new services that are going to be added to the network later.

Now if the cost of that depreciation were apportioned to those new services, that would be one thing. But to a company, the regional Bell Operating Companies come in and propose to put those costs on the local ratepayer. We just went through a case in Colorado where they wanted to change out a lot of T-1 carrier and put in

fiber optics. And their proposal put every penny of the cost of that on the local ratepayer, none of it on the customers who would actually need that kind of transmission capacity.

So that is where the rub is.

And I guess the questioning about whether these cross subsidies will be permitted by state regulators—it is not a matter of being unable to recognize them. They are out there for all to view. And it is not a matter of detecting them. They are obvious. Consumer advocates around the country are very concerned about the loading of these costs on the customers who do not actually need these kinds of facilities for the kinds of service that they are purchasing. That is the difficulty.

Senator EXON. I guess what you are saying, then, Mr. Binz, once again, if I interpret your remarks correctly, is that when we try to eliminate cross-subsidization, there are many ways that might play back in as the rate structures are envisioned by the regional Bells, and how that is carried out under the auspices of some state agencies who have some control in these areas?

Mr. BINZ. That is exactly right. S. 2800 says that they should not pay more for basic telephone service than they would if the companies had not entered the cable television business. I do not have any idea how to interpret or enforce that at the state level. The state commissioners are going to be presented with a bill for fiber optic cable in this part of the network, let us carve it up between basic service and cable television.

What is the answer to that? How is that done? Should basic telephone pay any of it? Probably not in the sense that the copper wire was good, did deliver a good voice signal, could service modems, and did lots of things.

Is the fiber optic cable better? Yes, I suppose it is. But how do you ensure that basic telephone rates do not go up to pay for the fiber optics?

Another way of saying it is where is the $400 billion or $200 billion going to come from? All from the new services that are going to be provided? It seems very unlikely to me.

Senator EXON. Proponents of S. 2800 have a goal of encouraging deployment of fiber optics, which seems like a worthy goal. There is a question in my mind. Fiber optics is the thing of the future. If not in the long-term, at least in the short-term future, and so I share that goal to try and encourage that.

However, the bill itself does not require, as I understand it, deployment of fiber optics. In the view of this panel, should the bill require the telephone companies to deploy fiber optics as a condition of being involved in the programming to make sure that the fiber optics and their unlimited, or nearly unlimited capacity, are actually used?

Mr. JOHNSON. If I might answer, Senator, certainly not. I believe that the notion of fiber optics into the home, with all of the benefits that accrue from that deployment, have been grossly exaggerated.

Again, the kinds of information services, the kinds of video services, educational, cultural and entertainment, the whole package that we have been able to see as described by the telephone companies, can be provided today.

Senator EXON. With the existing plant?

Mr. JOHNSON. With a broad-band video system, alongside the switched narrow-band system. Fiber optics is nothing more than a low signal loss transmission medium that improves signal quality and capacity.

We can provide with copper, by telephone company facilities and broad-band coaxial cable, this whole range of services. Switched video, as I said, is the only exception.

There is no magic in bringing fiber to the home. There is nothing revolutionary here. If there were a market for these services, they would be provided today. The problem is simply one of economics. The reason many of these services are not provided today is because it just is not economic to do so. They cannot cover their cost, and simply to substitute fiber for copper is not going to change that situation.

Thank you very much.

Senator EXON. Thank you.

Mr. HARRIS. I would like to take issue, if I could, with that answer.

We agree, Mr. Johnson and I, on many things, but the notion that if there is a market something would happen, and if it is not happening it must be because there is not a market, that may be good Econ 1-level textbook economic theory, but if there are all sorts of public policies which provide barriers and restrictions and raise the cost of doing so, it may be those restrictions rather than lack of a market that is preventing more rapid fiber economic value deployment.

Moreover, the economic value deployment of a switched video network is a function of how many people are on it. If this room is the only one connected to a network, it does not do a lot of good. If there are only ten classrooms that are connected, it does not do a lot of good. If all of the Nation's classrooms are on it, it would do an amount of good that we cannot even fathom as we sit here.

But we cannot realize those benefits by "leaving it to the market." It is going to happen because public policies remove the restrictions and barriers and on occasion provide positive incentives to make it happen. Every developed country in the world but the United States, has recognized that basic fact and acted accordingly.

Mr. SELANDER. May I make a comment as well? The Rand study addresses the issue of video on demand as if it is the only service that could possibly be imagined. If our sole purpose is to provide just video on demand, we really would not have much of a reason for accelerating fiber optics.

Video on demand is a very difficult service to provide. It is the ultimate service that no other technology can provide except fiber, and that fiber will not itself provide for many, many years. Again, if our sole purpose is to get video on demand, then we are all discussing the wrong thing here.

With fiber optics, we are talking about changing the way we work. Work at home, deliver education, and so on. Mr. Harris has already talked about that. There will be a wealth of services, and each one of these is not just one service but a whole series of individual services. The whole idea behind services on fiber is that we

could tailor services to an individual. For example, we would not have to commute if we did not want to go to work. There is a whole wealth of services that are out there.

Should we require fiber optics? That is really up to you, the policymakers. From the supplier's standpoint, what we are looking for is a level playing field here, a right to play the game. There are a number of ways that you can choose to get fiber rolling.

I said that Senator Burns has a pretty creative approach here that misses some pretty tough industry interests and gets the ball rolling. But however you choose to get volume, it would be consistent with the interests of telecommunications suppliers.

Mr. BINZ. Senator Exon, I would just note that there is a curious consensus here on one point, and that is that left to its devices the market is not going to produce a fiber optic network connecting every American. Now, that is a problem. I mean, you can let telcos enter the cable market. If the Rand Corporation study is correct they will build cable television networks in new neighborhoods. They will not attack cable companies in place, and they will not do it with fiber optics. I mean, that is what I think. I read from the Rand study.

Professor Harris just said that the market is not going to produce that.

Mr. HARRIS. Not with the existing restrictions imposed by existing public policies. That is the big difference.

Mr. BINZ. Such as price of local telephone service.

Mr. HARRIS. I am not saying we should go out and have a budget authorization of $200 billion to pay for fiber optics. I mean, look at the difference between what this country has spent on transportation in the last 40 years and what it spent on telecommunications. It spent virtually nothing out of public funds on telecommunications, and yet we have the best in the world.

How did we get that? We had a set of public policies that provided economic incentives for private investment, and a system of cross-subsidies to see that even those who could not otherwise afford it could have it—universal service. I see no reason why we cannot, and I see no reason why we should not, extend that same principle to the next generation telephone network as Japan is doing.

Senator EXON. Mr. Chairman, I certainly want to congratulate Mr. Binz and Mr. Harris and Mr. Selander and Mr. Johnson. Every question that is asked, there is a difference of opinion. They would fully qualify to be members of the United States Senate.

I do not know whether that is good or bad, but take it as a compliment or a put-down, depending upon your point of view.

If I could ask one last question, gentlemen, current law has a rural exemption from cable restrictions for telephone companies in communities of less than 2,500. Now, that is not used very much, obviously, because it is a very small number of people, but in some cases it is used. S. 2800 raises this rural exemption from 2,500 to 20,000. That means that none of the safeguards in the bill would apply to communities of less than 20,000. In Nebraska we have lots of those, and I guess almost every community of over 250 people has cable, including the small community of Byron, Nebraska, which has only 50 customers, but they do have cable.

In your view, what are the policy implications, if any, or how severe would they be, of raising the rural exemption to 20,000 as proposed in S. 2800?

Mr. HARRIS. I think there could be a positive benefit, because my understanding of the deployment of fiber now in the telephone network for non-video purposes, is that virtually all high-density links in the long distance network are optical fiber. It is not a question of which transmission medium you use. You use fiber. The engineer goes to the bookshelf and pulls off a manual. It is an open-and-shut case now.

On the high-density interoffice links, in Washington, DC, what would connect a switch out in Bethesda with downtown, with Arlington, and so on, those would be interconnected by fiber. So that part of the local network is now going to fiber, based strictly on existing economics, taking all the business restrictions on telephone companies.

Where there is much more of a question on the deployment of fiber is in the local loop, no matter where it would be, urban or local, and in the lightest density portions of the long distance network, where existing microwave and copper wire facilities may not yet be economically replaced by optical fiber. It seems to me that this inducement for telco entry, especially now into this intermediate category, from 2,500 to 20,000, which of course would greatly increase the number of applicable instances in terms of the population affected thereby, might well have an inducement to extend the fiber in the telephone network, as well, for pure telephone uses because it has the potential then for becoming a new backbone of a video delivery system as well.

Senator EXON. Any other comments?

If not, thank you, gentlemen.

And thank you very much, Mr. Chairman.

Senator INOUYE. In listening to your testimony, one gets the impression that we are already in the telecommunications age, and we are being left back. And if we do not do something about this, the Japanese and Europeans will overrun us. I would assume from your statement that it would be in our national interest to do something about this. And in order to do this we have to provide certain incentives or encouragement, policy-wise or some other way. And the one incentive that you see before us is the Burns bill.

In your studies, what sort of relationship does the telecommunications industry have with their country, say, in Japan or Germany? Is there a special relationship of subsidies, incentives, and such?

Mr. HARRIS. No. In fact, quite the opposite. One of the major changes in policies in those countries, and depending on the country, until about the late 1970s or early 1980s, the leading Pacific Rim and European countries were taxing telecommunications at enormous rates to subsidize postal operations. What we do through public funds in the U.S. to guarantee postal services to rural areas and small offices, they were doing with basically excessive telephone rates.

And beginning with France in 1975, and other countries quickly following pace, they realized that was entirely contrary to their national interests. And one of these countries after another began

trying to untax the system and remove the barriers and restrictions and obstacles that might inhibit the rate of technological advancement; always thinking that it is not today's telephone network, the cost of installing fiber today that matters, but where will their nation be positioned five or 10 years down the line.

Now where the special relationship existed, and this is crucial to our trade negotiations right now, is that, like the United States, the domestic telecommunications services providers, what were generally called PTTs, bought almost exclusively from domestic suppliers, usually a single "national champion," sometimes a larger number.

Siemens, for example, built into the global electronics, computer, telecommunications, scientific instruments power it is today because it had a preferred position in West Germany. Its R&D was financed, its manufacturing and investment was financed by these very large purchases from the Deutsche Bundesposte, the telephone system.

In Japan there was a so-called family of NTT suppliers, each of which today is major national competitor, NEC, Hitachi, Fujitsu, and Oki.

Now what those countries have done is to accelerate the rate of national investment in telecommunications, even if somewhat perhaps ahead of the market, because of the learning curve effects, the volume of production of their domestic suppliers, reducing their costs as other countries adopt this technology and make this investment, their equipment manufacturers will have a much better chance of competing in those markets.

A very clear, if somewhat smaller, example of this is Sweden. Two of the leading competitors today in cellular are Ericsson in cellular switches, and Nokia-Mobira, which is a leading world competitor in cellular telephone sets. How did they get there? This is a country of eight million people. It is a third the size of the State of California.

Policymakers in Sweden decided that by being the first to move to full-scale deployment of cellular they could give Ericsson and Mobira a head start as indeed they did. And now they have world market shares in cellular equipment that one has trouble imagining could come from a country of eight million.

Japan is doing the same thing with fiber optics right now. A recent study published by the Deutsche Bundesposte Research Institute, presented Airlie House, Virginia, last fall, concluded that whereas in 1979 the United States was the world leader in telecommunications technological capacity, by 1986, Japan had moved dramatically ahead, having "taken the lead in telecommunications development activities, and accumulated the largest stock of proprietary technology."

I have cited that study in my paper. I commend it to you, especially the graph of fiber optic patenting activity, which shows two lines, one a very steep line, and the other one a very flat line, that cross in 1985. One line represents the Japanese rate of newly granted international patents in optical fiber technologies, the other line, the U.S. rate. And I guess I need not tell you which has the steeper line.

While the U.S. had double the Japanese patent activity in 1979, by 1988, Japan was double the U.S. Those lines point toward our future. If we as a nation cannot rise above the narrow pursuit of industry self-interest and look out where those trends are heading, we are going to live to regret it.

Mr. JOHNSON. Mr. Chairman, I would like to say a few words. I think that Professor Harris has made a large number of very good observations about the activities in other countries and about their industrial policies that have promoted their own industries.

The major question is, what relevance does that experience have to fiber to the home? Whether or not we have fiber to the home we are going to have a good deal of fiber. Indeed, we already have a good deal of fiber. As you know, the long distance companies are installing it very rapidly. Telephone companies are putting it into their trunks and into their feeders for perfectly straightforward economic reasons. And cable operators are becoming increasingly interested in putting fiber into their trunks.

Again, the question is, what is the net effect of expanding fiber deployment to the home in terms of new services, in terms of competition, and in terms of benefits to all users of telecommunications, including basic telephone users?

My answer to that question is that fiber to the home makes rather little difference. It is irrelevant to the question of U.S. international competitiveness. There are many problems that we face as a Nation in becoming more competitive in the world. Fiber to the home is not one of them. We are seeing rapid technological developments in this country. For example, we have before us the debate about high definition television. I have recently done a study of that topic, and there we have many illustrations of problems posed by international competitiveness.

So we do have problems, to be sure. We do have problems of deciding what should be the role of the U.S. Government in promoting or not promoting certain industries. But I would suggest that this issue of fiber to the home is really not relevant. Whether we have fiber to the home; we will either be competitive or not, depending on a host of other policies that the United States may or may not adopt.

Thank you very much.

Senator INOUYE. Mr. Harris, you pooh-poohed the testimony of the "Washington Post" and said that you were chuckling over that, but in listening to the testimony of the two panels I get the impression that there is much uncertainty in this area. No one seems to be able to tell us how much it is going to cost. It has gone from ten cents a meter to I do not know how much Mr. Selander spoke about, going into the billions and trillions. I have no way of knowing whether I should pooh-pooh Mr. Simmons from the Post's testimony. It could be devastating for them, or maybe it would not be.

The question is, is this the only way we can provide this incentive to telephone companies so that we can be in the forefront once again in telecommunications?

Mr. HARRIS. I think there are many other steps that Congress could and ought to take. The reason that I pooh-pooh it is because it suggests, Senator, that you are going to leave your job, you are going to take a ten-year vacation. Imagine those kinds of results

while the Congress of the United States stands blindly by and one newspaper after another is wiped out by telephone companies who are monopolizing the flow of information to American households.

Now that is not conceivable.

Senator INOUYE. Newspaper companies have been wiped out over the years.

Mr. HARRIS. The little ones have been wiped out by the big ones like the "Washington Post," and even then we have given them special consideration because we understand there are tremendous economies in producing a daily newspaper, and so we allow some joint venture agreements and so on.

If it ever came to the point where literally the kind of "doom and gloom" scenario they cast this morning were even remotely coming true, I am confident that they first and foremost would be appealing to Congress to step in.

In my mind, when you have a lot of uncertainty about an action, especially the longer-run effects, whether pro or con, the key question one wants to ask is, is whether this is a reversible or irreversible decision. If it is an irreversible decision, we had better be exceedingly cautious. This is not an irreversible decision. Congress could act six months or a year or two years from now to completely reverse this legislation. The only reason it would do so would be some abusive incidents which would generate the public opinion to support the repeal of this law.

Are those things going to happen? I do not think they can. If they do, we have ample time to correct the situation.

Senator INOUYE. Many of you spoke of head-to-head competition between telcos and cable companies. Do you think that instead of head-to-head competition it would be gobbling up operations?

Mr. BINZ. Senator Inouye, I am not sure how it will occur, but I am quite convinced that a one-wire all-services technology deployment is going to rule out multiple providers. It is just going to be that way. In fact, that is what we will want because it will be too expensive to maintain redundant systems. They will be unnecessary. That is what natural monopoly is about.

So whether it is by merger, acquisition, joint venture or whatever, I am quite confident that instead of a head-to-head competitive situation on a city-by-city basis, we are going to have a single supplier. Right now we have two. One does broad band, and one does narrow band. One does switched, and one does unswitched. I cannot foresee two providing the same set of services, so one way or the other I think that is where we are going to get.

Mr. HARRIS. I think that is a possibility. Again, if and when that occurs, if we really got to the point where in spite of the Rand projections an integrated services network for voice, data and video over an optical fiber owned by whomever has a natural monopoly to the home, then at that point I would not only support but strongly urge that we have restrictions on the ownership interest in the source of programming moving over that single delivery system.

Right now, we are in the opposite position. We have not even an infant industry. We are trying to decide whether we want to let it be born or not. If it starts moving in that direction, then we have

ample time over a period of ten years to take accommodating action.

Senator INOUYE. So we should anticipate and support a monopoly?

Dr. HARRIS. No. As we see that unfolding, we should act then accordingly, rather than allowing the mere prospect of it at some point in the distant future, preventing it from acting now.

Mr. BINZ. Senator, I guess I would just take issue with the implication that things are very bad right now. I think things are very good right now by lots of measures. The U.S. telecommunications industry—and by that I would include cable, the telephone industry as well as other electronic deliveries—is one of the best in the world. It is. In our heart of hearts, we all know that. The question is how to make it better.

To build on the implication that this is a broken down system which is not delivering information age service today is a mistake. It is.

Referenced in earlier testimony was a study done by Mark Cooper for AARP and the Consumer Federation of America. Looking at that, looking at the wealth of information services available today to Americans and project the kind of growth that a system undisturbed is going to provide in that, it is a very impressive set of things.

I think the question is are we going to plunk $400 billion on a new strategy? Are we prepared to do that? I do not think we are. My bottom line would be to let this evolve; let us see where this is going. Obviously we do not know where it is going because some technologies wipe out others overnight.

Zap Mail service was a huge investment by Federal Express. It was wiped out overnight by Fax machines. Hundreds of millions of dollars invested in Zap Mail, four-hour delivery across the country. It sounds pretty good until you realize you can do it in four minutes over telecommunication links.

I think it would be a very serious mistake right now to decide on a model, the kind of model that the telephone companies have, and then set it up and deliver it. It could be very wrong.

Senator INOUYE. Mr. Selander.

Mr. SELANDER. A couple of points here.

First of all, I think you make a very good point in terms of how difficult it is to project the market size for services and how difficult it is to project what the costs of future technologies might be. I think you can have an unlimited number of studies and an unlimited number of hearings, and you are never going to find absolute truth on this.

The question is whether or not you can take small steps forward here, some perhaps reversible—that might be a special feature of the decision—small steps where you do not have to address major issues here such as, say, the MFJ.

In terms of understanding the degree of competition,—turnover of entire cable companies overnight or whether there going to be major buyouts—the bill limits this to practically nothing.

Will there be major competition? There is a lot of disagreement on this. I pointed out in my work that a lot of the initial deployment of fiber is actually going to be in new builds where there are

no cable or telco systems right now. This could be the situation in rural America. I also might point out some urban areas also have not been wired for cable. These are where the likely battles for customers are going to be. I do not see major inroads to the cable industry by telcos.

Overbuilds are not yet economic. The only reason why they would be is if the service is so bad by the cable supplier that they leave the door open. I see this as a small issue except in those areas where there is not a cable supplier right now.

Senator INOUYE. Needless to say, the subject that we have tackled today is a very complex one. And I have tried my best to follow the testimony very closely. But I began this day confused, and I end it confused.

I would like to keep the record open for one more week, and if you do wish to submit additional information or corrections or addendum, feel free to do so. I think it would help it if was in less technical language. Notwithstanding what Senator Exon said, we are not as good as you fellows.

Senator Burns.

Senator BURNS. Mr. Chairman, thank you very much. And again, I want to compliment you for this hearing, and thank these gentlemen for their time.

There is one thing I want to throw out here. We are headed down a road of reregulation. There is a bill there. And that is why we have to take this small step to make sure that competition or some way that promotes new technologies comes about. I was interested in what Mr. Johnson said, that it is not important whether fiber makes it to the home or not. I might even at this point see if Mr. Selander or Mr. Harris has a reaction to that.

I think it is important.

Mr. HARRIS. I think it is extraordinarily important.

Mr. SELANDER. I agree.

Mr. HARRIS. I do not think Japan has made the commitment it has to put fiber in the home because they are misguided, or because they misunderstand economics. They have a word in Japan which translates only into English very clumsily: "informatization." It plays a control role in Japanese public policy decisions. It conveives a whole different society based on flows of information beyond anything we have experienced today. And they believe optical fiber is merely a technology. It could be anything that would interconnect people to a much greater degree in the future than they have in the past: classrooms to homes, homes to offices, offices to factories, factories to financial centers, and the like.

I think that while we certainly do not want to just do whatever Japan does, the fact that they have made an $180 billion commitment of public funds to move in this direction strongly suggests to me that it does matter.

Senator BURNS. Well, again, I want to thank you. And, Mr. Chairman, I thank you.

Senator INOUYE. One question. Do the Japanese permit telephone companies to control programming?

Mr. HARRIS. Yes. There are virtually no line of business restrictions on NTT. It is in local, long distance, both of which are opened

up to competition. The electrical companies are now moving in. There is a separate subsidiary requirement.

But there now, in just the last five years, as shown in my study of Japanese telecommunications, there are well over 100 subsidiary lines of businesses that NTT has entered to try to promote greater usage of and faster deployment of their telecommunications network.

Senator INOUYE. And that is the last word, as they say on the program.

Thank you very much. And we will have our mark-up in about a week, I think.

[Whereupon, at 3:55 p.m., the hearing was adjourned.]

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Congress of the United States
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U.S. MILITARY ACADEMY

July 10, 1990

Senator Daniel K. Inouye
Chairman
Subcommittee on Communications
227 Senate Hart Office Building
Washington, D.C. 20510

Dear Senator Inouye:

Please find enclosed a copy of testimony submitted by Mr. Emanuel Kustas, President of First PC TV Network, Inc. from Poughkeepsie, New York.

I request that Mr. Kustas' testimony be made part of your hearing record on July 24, 1990. His experience at transmitting live video, voice and data to the home or office is relevant to the current public policy debate concerning regulation of the cable TV industry and the regulation of the telephone companies.

I also understand that Mr. Kustas is available to testify in person, on the 24th if requested.

Thank you for your consideration.

Sincerely,

/Hamilton Fish

HAMILTON FISH, JR.
Member of Congress

HF:tmw

Enclosure

cc: Senator Danforth

FIRST PC TV NETWORK, INC.
computerized televideo communications
(914) 454-5834

May 7, 1990

The Honorable Hamilton Fish Jr.
House of Representatives
2269 RHOB
Washington, D.C. 20515

Dear Congressman Fish:

I come before this committee to share with you our experiences in transmitting live video over dial-up phone lines. My contribution to this telecommunications debate primarily lies in our compression expertise because the key to transmitting live video is the issue of compression vs bandwith.

On paper PCTV and its sister company SWALLOWTAIL SYSTEMS might sound exciting, but because of our small size and third wave business practices we may not seem real to large firms. Yet we are a 68% margin company with over 650 Thousand copies of our compression out in the market. I believe us to be the unsung leader in compression. Our pioneering efforts enable us to currently demonstrate 8 to 1 compression and will soon be doing 12 to 1 compression over standard plain copper phone lines. This compression is not limited to telephony but can be extended to cellular, satellite video transmissions, or cable TV.

We believe our Video Phone technology to be the only low cost practical video telephones. We are positioned with low cost, low bandwith Video Intercoms suited for Key Systems, PBXs; long distant Video Telephones; Slow Scan Video for Medical Imaging; Passive Security; and Video/Voice Mail. Our claim is certainly true compared to expensive dedicated leased lines required by expensive systems and problematic technologies such as fiber optic to the home, ISDN or the vaguely specified BISDN. We are, however, compatible with fiber optic. In fact, our transmission is even better over fiber because there is more available bandwith as our video phones are digital ready and can deliver video, voice and data to the home or office. Take note of all the commercials from AT&T, GTE and SPRINT showing Video Phones as if they actually existed at affordable prices. What a coup even for the United States trade deficit should this capability unfold here in America and not be taken to Japan as did the VCR.

We believe our video phone puts reality into the concept that a low cost pratical video telephony alternative to expensive fiber optic capability is in the public's interest. For those that need or desire sophisticated high bandwith capability can either wait for the costs to come down or pay the cost of rewiring to their home or office. The alternative would be a full menu of low cost televideo capabilities made available at no cost to the general public with no tariffs, tolls or fees just like a Fax.

274 Hooker Avenue . Suite C-8 . Poughkeepsie, N.Y. 12603

HDTV promises over 1,000 x 1,000 pixels of resolution and, as of now, PCTV is delivering over 100x100 pixels using copper wire. Let us take for example, our Video Intercom whereby the frame rate and the image size can be varied under user control and be set at; 128x128 at 4fps, 100x100 at 10fps, 64x64 at 12fps, and 48x48 at 15fps with fully sycronized voice and video. We expect to double this performance with our next layer of compression.

This product could be sold profitably in volume at the same price as the still frame Mitsubishi and Panasonic units ($300-$400) for stand alone units and less if attached to a PC. Because we can trigger on motion it can be used after hours as a passive surveillance system which triggers on movement. It would be cost justifiable on its security use alone. Panasonic and Mitsubishi are two major vendors who sell home or office door monitors which require extensive wiring. The use of telephone lines especially existing lines radically reduces the cost of special wiring. This makes the Video Intercom very attractive and practical technology for the home or office.

Without PCTV, Video Intercoms are not practical using existing technology. Although one can certainly create a private intercom system using 75 ohm cable or dedicated lines point to point, the cost is outrageous. Other alternatives such as ISDN are much farther away from becoming universally accessible than AT&T would have one believe. We are demonstrating the level of video quality in intercoms as good as ISDN promises without the expense and in a timely fashion. Our demonstration systems require an IBM compatible PCs at each end. The prototypes use 2 AT board slots, the final product will use half of one board.

Late in the next decade when ISDN becomes a reality, for most to conform to the digital standards then in place (probably different from those now proposed) it will not be very difficult or expensive. Meanwhile we see the entire analog network, world wide to sell and within a time frame of 7-20 years depending on the country. As I understand the EEC proposal for "fully wiring" Europe in 1992 only 5% of the lines will be true ISDN and less than 80% of the market will have limited access to the aforementioned 5% of the trunks. Given the 18 years it has taken the USA to become 95% touch tone ready with only 68% touch tone users I am not losing sleep over all the self serving hype.

Our primary product is the long distance Video Telephone. I suppose a case can be made that we are not compatible with the few hundred video conference systems that are in the field and actually work. Frankly, we have no interest in communicating with a $50,000 system, it is not the market we have targeted. We are interested in already computer savvy users who want face

to face communications with others. Our products are designed to be manufactured for Hundreds of Dollars and are therefore affordable upgrades to computer systems or as standalone wall phones. High bandwith systems are expensive to purchase and to use and support. They promise a lot but none has delivered product for dial-up lines with quality greater than that which we demonstrate now nor once we double our current performance.

It was just recently that IBM Chairman Acker restated, "a sincere commitment to laptop and home PCs" at the shareholder's meeting in Phoenix. In our opinion, it is precisely those "offices in the home" (the core of Third Wave business) that need the Video Phones most. From what we can see, they would purchase video phone products today if offered at reasonable prices.

To complete fiber optic network implementation the Baby Bells estimate the cost at over $400 billion dollars and we can offer people the practical choice of PCTV's phones with good quality that cost effectively delivers live video to the home or office and all at the cost of a toll call.

Thank you for this opportunity and for your time.

Yours Cordially
PCTV NETWORK

Emanuel G. Kustas
President

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

IN REPLY REFER TO:

July 23, 1990

Honorable Conrad Burns
SD-183 Dirksen Senate Office Building
United States Senate
Washington, D.C. 20510-2603

Dear Senator Burns:

Thank you for the opportunity to comment on S. 2800, the Communications Competitiveness and Infrastructure Modernization Act of 1990. The issue addressed in the legislation -- telephone company provision of video programming -- is the subject of an on-going proceeding at the Federal Communications Commission, CC Docket 87-266. The Further Notice in that proceeding tentatively concluded that the public interest would be served by eliminating the current ban and allowing telephone companies to provide video programming in their telephone service areas, subject to various nonstructural and accounting safeguards. Extensive comments were filed in response to the tentative conclusion, and the Commission has not reached a final determination.

The need for an expeditious response to your questions, together with the pendancy of the Commission's proceeding, have not permitted me to obtain the views of the Commissioners. However, it appears that S. 2800 reflects a strong commitment to protect ratepayers if telephone companies are allowed to enter the cable marketplace. Ensuring that the fundamental interests are adequately safeguarded, of course, remains an important Commission goal.

Sincerely,

Richard M. Firestone

Richard M. Firestone
Chief, Common Carrier Bureau

Enclosure

Question No. 1: One of the leading allegations against S. 2800 is that the FCC and the various state commissions would be unable to regulate against cross-subsidization. Can you comment on this allegation and give your opinion as to whether the FCC and individual state commissions can, in fact, guard against cross-subsidization?

The accounting safeguards S. 2800 proposes are similar to those the Commission and the states now use to prevent cross-subsidization in relation to current services. These existing safeguards are effective. At the federal level, they deter telephone companies from attempting to misallocate costs and enable auditors to identify those that might. They also aid our efforts to keep interstate rates reasonable by facilitating benchmark comparisons among companies.

Recent improvements in regulatory approaches should decrease telephone companies' incentives to cross-subsidize. The Commission and the states have taken great strides in the movement from traditional rate of return regulation to incentive regulation, such as that being considered in the Commission's price cap proceeding. As incentive regulation is implemented, a company's motivation is no longer to shift costs to its regulated rate base activities and cross-subsidize its unregulated activities. With regulated telephone service prices capped, costs which are shifted or misallocated cannot be recovered.

During recent years, Congress has greatly increased the Commission's data processing capability through the appropriations process, and this capability has played a major part in our efforts to keep interstate rates reasonable. We are working with the National Association of Regulatory Utility Commissioners to develop a system that will make comprehensive, computer-based information on telephone companies available to all the states as well. By providing each state with information on other telephone companies, in addition to those it regulates, this system will allow the states to make benchmark comparisons.

Question No. 2: S. 2800 provides a number of specific safeguards designed to protect against cross-subsidization (telephone service price cap, cost allocation, separate subsidiary, increased penalties, etc.). Would you comment on the adequacy of S. 2800's safeguards concerning cross-subsidization?

Question No. 3: In particular, S. 2800 mandates that any video operations be conducted through a wholly separate subsidiary. Do you believe that such a separate subsidiary requirement is necessary?

Questions 2. and 3. are closely related, and are answered together.

Congress and the Commission have long recognized that safeguards are necessary to protect consumers against possible abuses when telephone companies having

substantial market power enter other markets. The safeguards S. 2800 proposes, as supplemented by the Commission and the states through their rulemaking authority, would provide significant protection against telephone company misconduct. With regard to separate subsidiaries generally, during the past five years the Commission has decided that structural separation requirements for AT&T and the BOCs for provision of customer premises equipment (CPE) and enhanced services should be replaced by nonstructural safeguards including Open Network Architecture (ONA). We have not required separate subsidiaries for the provision of unregulated services by the local telephone companies other than the BOCs since 1980.

The U.S. Court of Appeals for the Ninth Circuit recently overturned key parts of the Commission's Computer III regime, finding that the Commission had inadequately justified its decision to move to nonstructural safeguards for BOC provision of enhanced services. The Court did not, however, criticize ONA, which serves to protect against unreasonable discrimination and was the model for some of the Commission's proposed safeguards in the Further Notice in CC Docket 87-266. Chairman Sikes has stated that the Commission intends to move forward with ONA. He also has announced the Commission's intent to initiate a proceeding this fall to reexamine on the basis of a new record whether the Commission should require the BOCs to employ separate subsidiaries in their provision of enhanced services.

Question No. 4: Would it be reasonable to expect, under S. 2800, that any losses incurred by the telephone company's separate subsidiary providing video programming would not be included in the rate base and charged to the telephone ratepayer?

The bill's requirement that asset transfers between the telephone company and its programming affiliate be on a fully compensatory and auditable basis would help insulate ratepayers from any losses that a telephone company's video programming subsidiary might incur. Additional protection could be realized by exercise of the Commission's rulemaking authority.

Question No. 5: S. 2800 provides a number of specific safeguards designed to protect against self-dealing (limitation on vertical integration, video gateway requirement, etc.). Would you comment on the adequacy of S. 2800's safeguards concerning self-dealing?

The safeguards the bill proposes to prevent self-dealing are similar to those the Commission and the states traditionally have applied to keep telephone companies from engaging in anticompetitive conduct. We could refine and augment these safeguards and adapt them to changing conditions. For example, the bill would require telephone companies to provide nondiscriminatory access to their video gateways under certain circumstances. The Commission would determine precisely when these gateways should be established and the measures telephone companies would have to take to ensure nondiscriminatory access.

Question No. 6: Although the FCC, as well as individual state commissions, may have the ability to guard against cross-subsidization, the ability for one to try and break rules is always present. S. 2800, therefore, contains a "death penalty" provision. Under that provision, if a telephone company engages in cross-subsidization, it would be forced to divest its separate subsidiary providing cable service. That penalty would be in addition to the penalties available in the Communications Act of 1934 and FCC rules and regulations, the individual state commission's activities and penalties, and the antitrust laws. What do you believe would be the effect of such a penalty in addition to the current penalties available to you through the 1934 Communications Act?

The Commission considers the magnitude of the violation in applying the broad range of enforcement tools presently in the Communications Act. In 1989, Congress substantially increased the Commission's forfeiture authority. Making explicit Commission discretion to require divestiture in appropriate circumstances would provide additional incentives for telephone companies not to use revenues from regulated telephone services to cross-subsidize their video programming operations, without inhibiting telephone company entry into that market. Making such a penalty mandatory in the event of any willful and knowing violation, however, irrespective of the amounts involved or their impact, may be unwarranted.

Question No. 7: Does the Commission have any evidence, or reason to believe, that the customers of telephone companies currently offering cable television services are paying any more for telephone service than customers of telephone companies who are not offering cable services?

In instances where the cross-ownership ban has been waived and telephone companies have been permitted to provide video programming, the Commission has imposed strict accounting requirements to protect ratepayers. The Commission has received no formal complaints since 1983 alleging improper accounting.

In 1983 a complaint was filed alleging a variety of misconduct involving a telephone company. After a vigorous investigation, the Commission imposed the maximum possible forfeiture under its then existing statutory authority and required the specific telephone company to divest its cable television operation.

Question No. 8: An FCC price cap plan for local telephone companies could provide a basis for additional safeguards by removing the incentives and opportunities for cross-subsidies. Would you comment on this aspect of the price cap plan?

Price cap regulation will be an effective aid to ensure that ratepayers are held harmless from carrier investment decisions, so that ratepayers will not bear the risks of decisions to provide video access on a common carrier basis. Price cap regulation breaks the link between investment decisions and prices, since the price cap is not tied to a carrier's rate base. Shareholders therefore would bear the risk of investment decisions in broadband technology. Price cap regulation also will eliminate the incentive to shift costs of non-regulated services, such as programming, to regulaced services because prices of regulated offerings cannot be raised to recover such costs. Thus, price caps support the general approach in S. 2800. The Commission has not yet concluded its price cap proceeding, however, and I note the Commission's tentative price cap plan is not mandatory with respect to all local exchange companies.

Question No. 9: If telephone companies construct a broadband delivery system, would it be reasonable to expect telephone companies to adopt an exclusionary policy with regard to access by third party programmers or other information service providers to this broadband system, regardless of whether the telephone company provides video services through a separate subsidiary?

If telephone companies construct and operate a broadband delivery system, they would have incentives to maximize use of, and revenues from, broadband transmission services provided over it. Greatest use of the network might be accomplished by promoting its use by as many diverse parties as possible through reasonable and nondiscriminatory access, prices and other terms and conditions. The telephone company might also have countervailing incentives to discriminate in favor of its own, and against independent, video programming services. In its Further Notice the Commission tentatively concluded that safeguards against cross-subsidization and discrimination would be necessary if telephone companies were permitted to provide programming over broadband common carrier networks. S. 2800 recognizes this potential for anticompetitive conduct and establishes safeguarding mechanisms. Supplementary measures in this area, if warranted, could be adopted by rulemaking.

Question No. 10: S. 2800 provides assurances that cable companies will have access to telephone company poles, ducts and conduits. Would you comment on this provision? Is there any reason to believe that the Pole Attachment Act of 1978 has not lived up to its purpose in allowing cable television companies access to telco poles and conduits?

In the Further Notice the Commission found that regulatory oversight will continue to be necessary in order to assure fair and nondiscriminatory access to telephone company controlled poles and conduit if telephone companies are permitted to provide video programming. Section 656 of S. 2800 appears to be supported by that determination. I have no reason to believe that the Pole Attachment Act has not provided remedies for discrimination in access to poles and conduit.

Question No. 11: S. 2800 prevents local governments from unreasonably refusing to award multiple franchises. Would you comment on this provision?

In testimony before the Senate Commerce Committee, Chairman Sikes has strongly supported nonexclusive franchising. Restrictive franchising provisions can hinder competition in cable service. There is a strong federal interest in promoting competition in cable television service, and the awarding of multiple franchises would further that objective. The proposed requirement in S. 2800 that local governments not unreasonably deny franchises would advance that policy.

Question No. 12: Certain parties involved in the debate over S. 2800 contend that the Commission does not possess the resources to provide the oversight contemplated by S. 2800's regulatory safeguard scheme. Does the Commission possess the necessary resources to carry out the mandate of S. 2800? If not, what would be required to accomplish the task?

Adequacy of funding to ensure effective regulation is an important issue, as recent statements of Chairman Sikes have indicated. Nonetheless, in the recent past the Commission has fulfilled its regulatory mission despite reduced resources. The need for increased resources occasioned by legislation which may increase regulatory responsibilities can be accommodated by appropriate budget requests and Congressional action.

Question No. 13: Do you favor the Administration's position with respect to favoring competition over regulation in dealing with the "cable problem?"

The Commission has consistently favored achieving solutions to market dysfunctions by increasing competition, rather than through regulation, wherever feasible. That general view appears to be consistent with the view expressed by the Administration. In pending proceedings, the Commission is considering the appropriate role for telephone companies with respect to the cable marketplace. It would therefore be improper to comment further at this time.

Question No. 14: Japan, West Germany, France and the United Kingdom are all aggressively deploying broadband technology. Does the Commission have any evidence that telephone subscribers in those countries are paying unreasonable or excessive rates? Further, does the Commission have any evidence that there have been tangible benefits from the deployment of broadband technology? Is the United States' communications infrastructure likely to be enhanced by passage of S. 2800?

A modern telecommunications infrastructure is vital to our nation both domestically and in the increasingly competitive international marketplace, not just for telecommunications products and services, but also for all those industries increasingly dependent on telecommunications for their operations. Telephone companies must play a major role in assuring that the telecommunications infrastructure is able to provide the services necessary for the United States to remain competitive. In the Further Notice the Commission tentatively concluded that allowing telephone companies to provide video programming subject to safeguards would create incentives to construct and operate broadband networks that could be used to provide new and improved services to businesses and the public.

Efforts in other countries to deploy fiber-to-the-home may provide useful experience for the United States. In fact, several fiber-to-the-home trials are under way in the United States. The Bureau has no information that these efforts have resulted in unreasonable or excessive rates, domestically or internationally.

Question No. 15: NTT is aggressively pursuing the deployment of broadband technology in rural Japan through its "Telctopia" project. Does the United States have any similar plan for rural America. Would passage of S. 2800 be more likely or less likely to result in the more rapid deployment of broadband technology in rural America?

Assuring that rural areas receive the same benefits of communications technology and services as more populous regions is an important goal. Modern communications technology can keep rural America competitive in the information age. Telephone companies are permitted today to provide video programming in communities of less than 2500 persons. This "rural exemption" is designed to assure that rural areas are not unnecessarily deprived of cable television service. Assuming the rural exemption would continue under S. 2800, its impact would be felt primarily in communities of greater than 2500 population. In the Further Notice the Commission is examining whether the rural exemption should be extended to larger communities. The tentative conclusion in the Further Notice that telephone company entry into programming would stimulate investment in broadband technology would support the view that passage of S. 2800 would hasten deployment of broadband technology in rural America.